

**PARTS LIST
LISTE PIECES DETACHEES
ERSATZTEILLISTE
LISTA PARTI DI RICAMBIO
LISTA DE PIEZAS DE REPUESTO**

Chassis ICC17

MODULES

MAIN IC17F6CP015030



GK01	TFMK1330T	10132410
IB01	TDA6107Q	10533940
IF01	TDA8351	20753830
IP20	TS3702CD FLAT	10537330
IP61	TL431ACZ	10538830
IP87	MC7812/CT	46007600
IP95	TDA8139	10044580
IR01	ST92R195 CUT.2.1 FLAT	10588180
IR02	MX27C4000MC-12	10585660
IR03	M24C08MN FLAT	10564350
IS40	MSP3400C-PP-C6	10379290
IS80	TDA7269	10348790
IV01	TDA8855H FLAT	10533960
IX01	BA7604N	10539590
ZL11	MP40	△ 10469170
ZL13	MP63	△ 10472270
ZL14	MP50	△ 10457120



IP50	TLP621 GR(D4-LF2 T)	△ 20827900
TB01,TP21	BF423	16003110
TB02,TL02	BF422	16003090
TF01,TI60, TL31,TP58,59, 67,71,76,90, TR60,TS01,81, TV10	BC847B SMD	11070770
TI10	DTC144EK SMD	16007030
TL14	2SC2236Y	16000220
TL32	BC337-40	45001466
TL33	MPS750	16001340
TL34,TP50	BUH516TH16	10401110
TL41	BD241C	16001880
TL42	BC546B	45001866
TL59,TP42,86, TR15	BC857B SMD	30946660
TL71	BC847C SMD	90618810
TL72	RN1401 SMD	10966100
TP14,TX15,45	BC547B	16000890

TP15	BTB06-600C	10259910
TP44	2SA1020Y	16003740
TP57,75,82	BCR191 SMD	16006910
TP72,TR20	DTC113ZK SMD	10550750
TR13,23,40	BCR141 SMD	16006890



DB04	1N4004	44009009
DB30,31,50,51, 70,71,DL31	BAV21	44044407
DE01	BZX55C2V7	80444120
DF01	BZW04-48	10351880
DH01	BZX55B33	80442730
DH04,DL12,32, 33,72,74,75, DP53,DR20,23, DV19	1N4148	44009209
DK01,DL09,	BZX55C5V1/ZPD5V1	80444140
DP72		
DL11	RGP10M	10455320
DL13	RGP30D	10455370
DL14	RGP15G	10272800
DL19,73,77, DP24,40,42,52, 54,56,57,58, 60,61,62,63, 67,70,85,89, DR21,22,24, DV09	LL4148 SMD	16012450
DL21	BY228	10406470
DL22,DP80	BYW76	16009120
DL24,25,DP12, 41,46,47,48	RGP10G	10459090
DL42	ZMM5,1 SMD	70446740
DL48,DX59,62	BAV103 SMD	10155030
DL71	BZX55C30	80444170
DP01,02,03,04	BYW27-1000	10455390
DP14	BZX55C3V3	30948790
DP16,17,18,19	1N4001	16008160
DP20	ZPD51/BZX55C51/BZX79C51	90578110
DP21	BZX85C39	80444000
DP22	BZX55C5V6/ZPD5V6	44025401
DP43,45,50,87	RGP02-20	10472330
DP44	BZX55C3V9	80444130
DP59	BZX55C18	11073680
DP82	FUF4005	16009580
DP83,DR10	BAT42	16007410

DP84,93	MUR120	10564670
DP94	BZX55C13	70438310
DR05	LL42 SMD	16012530
DS90	BZX55C3V6	50890640
GE01	TLUV5300 LED	11137650



FI10	OFWG3970M FOS	10512420
FI20	OFWK9354M FOS	10354110
FI50	5M74HZ	20338170
QC01	4M433619HZ	10542210
QC02	3M579545HZ	10542190
QS40	18M432HZ	10334670



FI01	40M4HZ	20300950
FI02	31M9HZ	10552630
FI30	77M8HZ	10559760



PP64	1K0 OHM	70434550
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RB01,04	1K5 OHM 5% 0,50W	10121880
RB31,51,71	560R0 OHM 10% 0,50W	10257590
RC02,RV01	1R0 OHM 5% 0,40W	△ 35031200
RF05	1R0 OHM 1% 0,70W	10254220
RF07	220R0 OHM 1% 0,70W	10233720
RF08	33R0 OHM 10% 0,25W	△ 13062810
RL01	45K3 OHM 1% 0,25W	15018160
RL07	6K19 OHM 1% 0,40W	15020490
RL10	47R0 OHM 5% 0,50W	10233220
RL13,RP49	0R47 OHM 5% 2,5W	10537750
RL35	4R7 OHM 5% 0,50W	△ 15010040
RL36,RP10	2R2 OHM 5% 0,25W	△ 15009870
RL43	68K1 OHM 1% 0,70W	10147740
RL44	2R2 OHM 5% 0,50W	△ 10440420
RP04	2R7 OHM 5% 4,50W	10379110
RP15	18R0 OHM 220V PTC	△ 41398800
RP50	10M0 OHM 5% 0,70W	△ 10074320

R : RECYCLED PART
: **PIECE RECYCLEE**
: **AUSTAUSCHTEILE**
: **RICAMBIO RICICLATO**
: **MODULO REPROCESADO**

For any requests, please contact THOMSON multimedia after sales service area
Pour toutes précisions, contactez votre service apres vente local THOMSON multimedia
Für weitere Auskünfte, wenden Sie sich bitte an die THOMSON multimedia Kundendienst
Per precisazioni, contattare l'assistenza tecnica THOMSON multimedia
Para cualquier pregunta, por favor contactar con el responsable de zona del servicio postventa de THOMSON multimedia

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REV. N° 0 00 / 00 0000000
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RP63	432K0 OHM 1% 0,25W	15017950
RS12	18R0 OHM 5% 0,30W	△ 15009660
RS20,87,88	4R7 OHM 5% 0,25W	△ 35032200
RV20	33K2 OHM 1% 0,25W	15016530
RX17	10R0 OHM 5% 0,25W	△ 15009580



CB01	10N0F 3K0V	14036450
CL08	10N0F 5% 400V	14035870
CL12,15,CP42,85,94	330P0F 20% 1K0V	14035270
CL21	14N0F 3,5% 1K6V	43461200
CL22	30N0F 5% 400V	10242070
CL24	440N0F 5% 250V	43352100
CL42	2U7F 10% 100V	10161170
CP01	100N0F 20% 275V	△ 10331520
CP03,04	4N7F 1K0V	10058740
CP05	1N5F 10% 1K0V	20338740
CP10	150U0F 385V	43424800
CP11	10N0F 10% 400V	15001080
CP16,17	220N0F 20% 275V	△ 30745000
CP20	220P0F 10% 400V	14033000
CP49	1N0F 10% 1K6V	10539060
CP50	1N0F 20% 400V	△ 43106800
CP51	150P0F 20% 400V	△ 20298500
CP83	100P0F 20% 1K0V	14035280



LL05	DSTM30FBC3	△ 10546610
LL26		△ 10526140
LL32	DRIVER	10518110
LP01		△ 10261530
LP20	DRIVER	△ 10554410
LP44	DRIVER	10561800
LP50	SMT41	△ 10537860

OTHER PARTS

AUTRES PIECES

SONSTIGE TEILE

ALTRE PARTI

OTRAS PIEZAS

BB05	CATHODE RAY TUBE SOCKET SUPPORT TUBE CATHODIQUE BILDROEHRENFASSUNG SUPPORTO TUBO CATODICO SOPORTE T.R.C	△ 80298800
BJ10	CINCH SOCKET PRISE CINCH CINCH-BUCHSE PRESA CINCH TOMA CINCH	10037440
BJ11	SVHS SOCKET PRISE SVHS S-VHS-BUCHSE PRESA SVHS TOMA SVHS	20392900

BQ12	JACK SOCKET PRISE JACK BUCHSE PRESA JACK TOMA JACK	10539510
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BX01,02	SCART SOCKET PRISE PERITEL EURO-AV-BUCHSE EUROPRESA NORMALIZZATA EUROCONNECTOR	90617260
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CO115	ON/OFF SWITCH CONTACTEUR MARCHE/ARRET EIN-AUS SCHALTER CONTATTORE ACCESO/SPENTO CONTACTOR MARCHA/PARADA	△ 10276500
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FP01	2A5T TIME-LAG FUSE 2A5T FUSIBLE TEMPORISE 2A5T SICHERUNG 2A5T FUSIBILE TEMPORIZZATO 2A5T FUSIBLE TEMPORIZADO	△ 10246750
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NH01	CTT5010 UHF/VHF TUNER CTT5010 TETE UHF/VHF CTT5010 UHF/VHF TUNER CTT5010 TUNER UHF/VHF CTT5010 SINTONIZADOR UHF/VHF	R 20812280
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SK01,02,03,04	MICROSWITCH MICRO CONTACTEUR MIKROSCHALTER MICROINTERRUTTORE MICROCONTACTOR	30011100
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EQUIPMENT/PRESENTATION

EQUIPEMENT/PRESENTATION

AUSSTATTUNG/GEHAEUSE

PARTI VARIE

EQUIPO/PRESENTACION

FRONT PANEL	25363380
FACADE FRONTPLATTE PANNELLO FRONTALE PANEL FRONTAL	

LOGO THOMSON	25287740
LOGO THOMSON SCHRIFTZUG THOMSON MARCHIO THOMSON LOGOTIPO THOMSON	

LOUDSPEAKER GUIDE	25301600
CORNET ACOUSTIQUE FUEHRUNGSSCHIENE LAUTSPRECHER GUIDA ALTOPARLANTE GUIA ALTAVOZ	

8R OHM 15W LOUDSPEAKER 60X125	10467060
8R OHM 15W HAUT PARLEUR 60X125 8R OHM 15W LAUTSPRECHER 60X125 8R OHM 15W ALTOPARLANTE 60X125 8R OHM 15W ALTAVOZ 60X125	

REAR PANEL	△ 25314910
DOS RUECKWAND PANNELLO POSTERIORE TAPA POSTERIOR	

POWER SUPPLY LEAD	△ 10260880
CORDON D'ALIMENTATION NETZKABEL CAVO DI ALIMENTAZIONE CABLE DE ALIMENTACION	

ON/OFF BUTTON	25313050
TOUCHE MARCHE/ARRET EIN-AUS TASTE TASTO ACCESSO/SPENTO TECLA MARCHA/PARADA	

BUTTON STRIP	25330350
BARRETTE DE TOUCHES TASTENLEISTE PIATTINA TASTI PLACA DE TECLAS	

CHASSIS SUPPORT	25297670
SUPPORT CHASSIS CHASSIS HALTER SUPPORTO CHASSIS SOPORTE CHASSIS	

A59EHJ43X15 CATHODE RAY TUBE	△ 10555690
A59EHJ43X15 TUBE CATHODIQUE A59EHJ43X15 FARBBILDROEHRE A59EHJ43X15 TUBO CATODICO A59EHJ43X15 T.R.C	

DEGAUSSING COIL	△ 47320092
BOBINE DE DEMAGNETISATION ENTMAGNETISIERUNGSSPULE BOBINA DI SMAGNETIZZAZIONE BOBINA DE DESIMANTACION	

RCT100 REMOTE CONTROL	10546340
RCT100 TELECOMMANDE RCT100 FERNBEDIENUNG RCT100 TELECOMANDO RCT100 TELEMANDO	

FOLDING BOX	25302970
EMBALLAGE CARTON KARTON IMBALLAGGIO CARTONE EMBALAJE CARTON	

FITTING UPPER	25303020
CALE SUPERIEURE POLSTER OBEN Distanziatore superiore CALZO SUPERIOR	

FITTING DOWNER	25303050
CALE INFERIEURE POLSTER UNTEN Distanziatore inferiore CALZO INFERIOR	

INSTRUCTIONS

NOTICES

ANLEITUNGEN

ISTRUZIONI

MANUALE

25DG21C PARTS LIST	35065280
25DG21C LISTE DE PIECES DETACHEES 25DG21C ERSATZTEILLISTE 25DG21C LISTA PARTI DI RICAMBIO 25DG21C LISTA DE PIEZAS DE REPUESTO	

ICC17 SERVICE MANUEL EUROPE	35063330
ICC17 DOC TECHNIQUE EUROPE ICC17 TECHNISCHE DOKUMENTATION EUROPE ICC17 DOCUMENTAZIONE TECNICA EUROPE ICC17 DOCUMENTACION TECNICA EUROPE	

25DG21C UM THOMSON D/I/GB/GR/F	25340560
25DG21C NU THOMSON D/I/GB/GR/F 25DG21C BA THOMSON D/I/GB/GR/F 25DG21C IU THOMSON D/I/GB/GR/F 25DG21C IU THOMSON D/I/GB/GR/F	

25DG21C

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WARNING : *Before servicing this chassis read the safety recommendations.*
ATTENTION : *Avant toute intervention sur ce châssis, lire les recommandations de sécurité.*
ACHTUNG : *Vor jedem Eingriff auf diesem Chassis, die Sicherheitsvorschriften lesen.*
ATTENZIONE : *Prima di intervenire sullo chassis, leggere le norme di sicurezza.*
IMPORTANTE : *Antes de cualquier intervención, leer las recomendaciones de seguridad.*

Do not disconnect modules when they are enregized! Repairs on power supply section are to be carried out only with isolating transformer.

Ne pas retirer les modules lorsqu'ils sont sous tension. N'effectuer les travaux de maintenance sur la partie reliée au secteur (Switch Mode) qu'au travers d'un transformateur d'isolement. Module nicht bei eingeschaltetem Gerät entfernen ! Servicearbeiten am Netzteil nur unter Verwendung eines Regeltrenntrafos durchführen.

Non scollegare i moduli quando sono alimentati! Intraprendere riparazioni sulla sezione alimentatore solo con trasformatore isolante.

No desconectar los módulos cuando están activados. Las reparaciones en la sección de alimentación de energía deben ser ejecutadas solamente con un transformador de separación.

⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be guaranteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraine la non-conformité de l'appareil. Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) nicht durch Original - Ersatzteile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione degli elementi di sicurezza (marcati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformità dell'apparecchio. In tal caso è "esclusa la responsabilità " del costruttore.

La sustitución de elementos de seguridad (marcados con el simbolo ⚠) por componentes no homologados segun la norma CEI 65, provoca la no conformidad del aparato. En ese caso, el fabricante cesa de ser responsable.

Note : During measurements in the power supply unit, use the primary power unit ground (Emit. TP060).

Attention : Mesures dans le bloc alimentation. Utiliser la masse du bloc alimentation (Emit. TP060).

Achtung : Bei Messungen im Primärnetzteil. Primärnetzteilmasse verwenden (Emit. TP060).

Attentionze : Misure nell'alimentatore primario. Usare massa alimentazione primario (Emit. TP060).

Cuidado : Medida en el bloque de alimentación. Utilizar la masa del bloque de alimentación (Emit. TP060).

MEASUREMENT CONDITIONS - CONDITIONS DE MESURES - MESSBEDINGUNGEN CONDIZIONI DI MISURA - CONDICIONES DE MEDIDAS

RECEIVER :

Bar test pattern : PAL, I standard, 100% white.

- On UHF, input level 1 mV
- Via the scart socket, input level 1 Vpp

Colour, contrast and brightness at mid-position, sound at minimum.

Programme selected : PR 01.

DC voltages measured between the point and earth using a digital voltmeter.

RECEPTEUR :

Mire de barres : SECAM, Norm L, Blanc 100%.

- En UHF, niveau d'entrée 1 mV
- Par la prise PÉritélévision, niveau d'entrée 1Vcc.

Couleur, contraste, lumière à mi-course, son minimum.

Programme affecté PR 01.

Tensions continues relevées par rapport à la masse avec un voltmètre numérique.

EMPFÄNGER :

Farbbalken : PAL, Norm G, Weiss 100%

- Bei UHF Eingangspegel 1 mV.
- Über die Scartbuchse : Eingangspegel 1 Vss.

Farbe, Kontrast, Helligkeit in der Mitte des Bereichs, Ton auf Minimum.

Zugeordnetes Programm PR 01.

Gleichspannungen mit einem digitalen Voltmeter zur Masse gemessen.

RICEVITORE :

Monoscopio per barre : PAL, norma G. bianco 100%.

- In UHF, livello d'entrata 1 mV,
- Per la presa SCART, livello d'entrata 1 Vcc.

Colore, Contrasto, Luce a metà corsa, Suono minimo.

Programma designato PR 01.

Tensioni continue rilevate rispetto alla massa con un voltmetro numerico.

RECEPTOR :

Mira de barras : PAL, norma G, blanco 100%.

- En UHF, nivel de entrada 1 mV,
- Por la toma Peritelevision, nivel de entrada 1 Vpp.

Color, Contraste, luz a mitad de carrera, Sonido minimo.

Programa afectado PR 01.

Tensiones continuas marcadas en relacion a la masa con un voltmetro digital.

VOLTAGGI DC SECONDARI

Tutte le misurazioni in questo capitolo dovrebbero essere fatte SENZA i voltaggi principali.

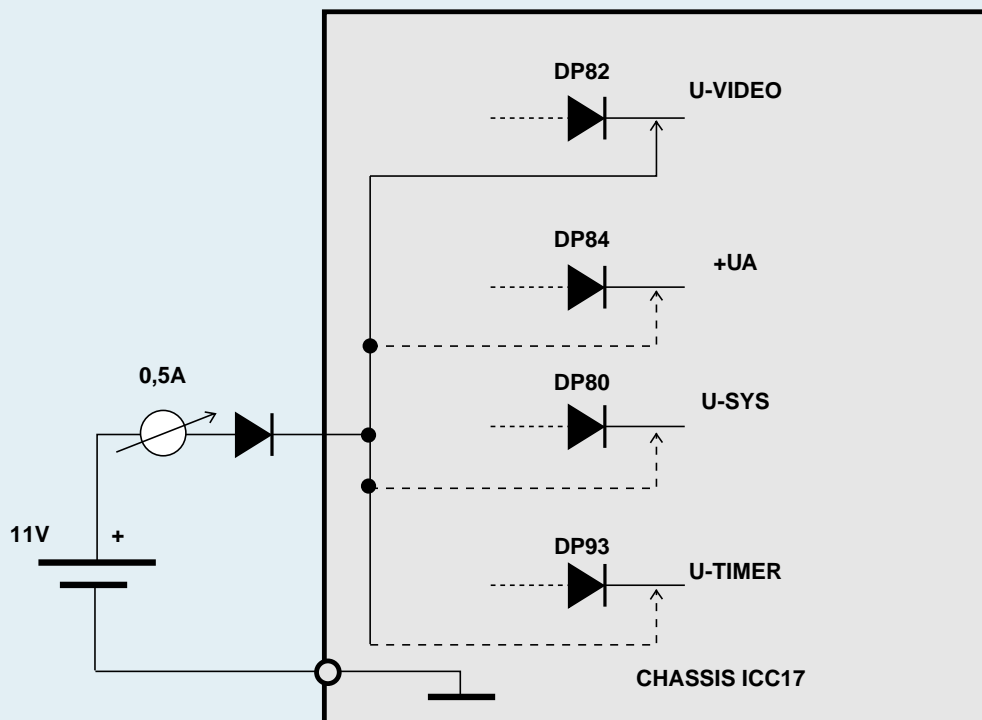
Test del circuito:

il voltaggio esterno è una fornitura d'energia esterna DC con un voltaggio regolato di 11V e una limitazione di corrente a 0,5A.

Il polo della fornitura del voltaggio esterno deve essere direttamente connesso al campo secondario del telaio.

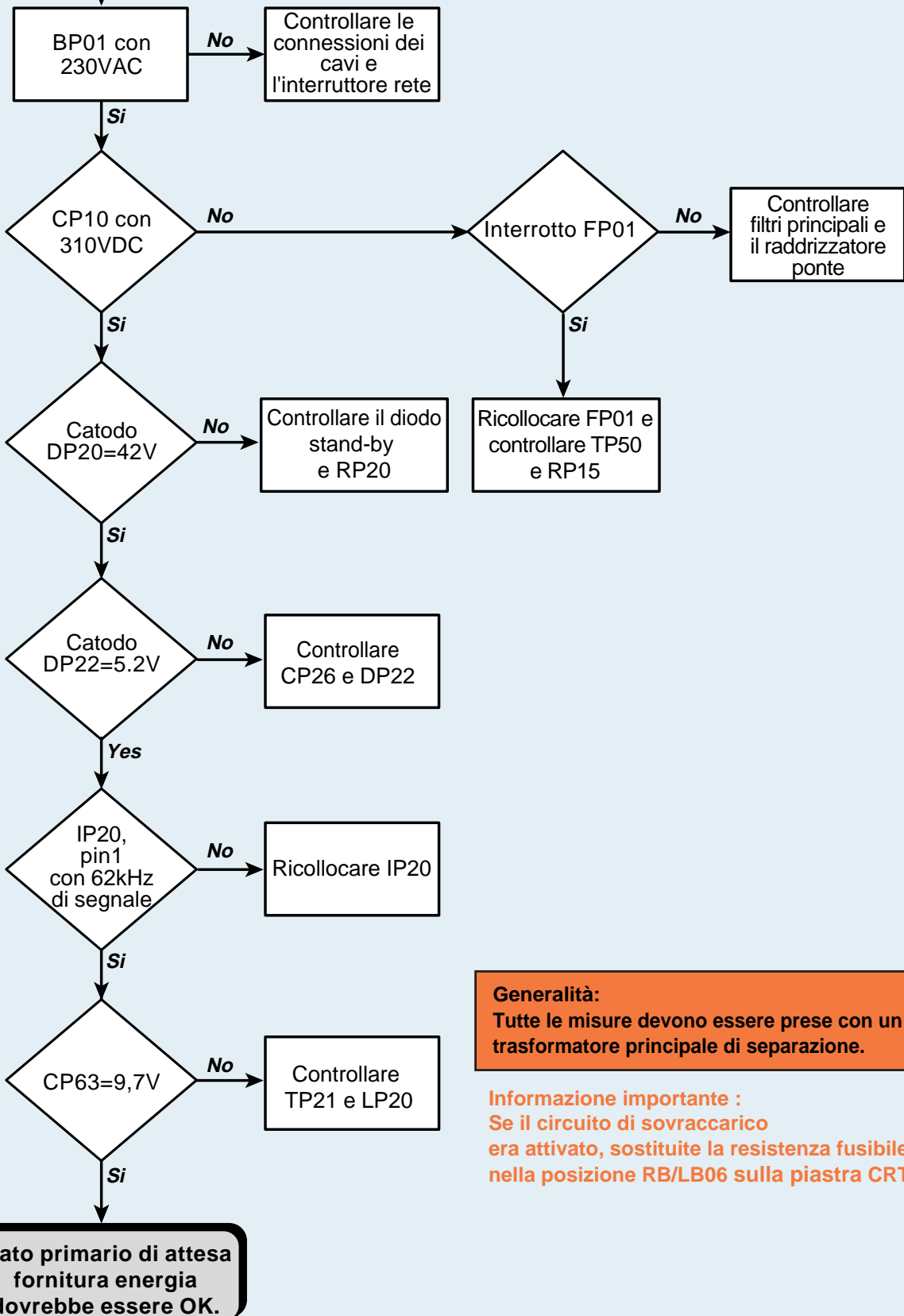
Il polo + della fornitura del voltaggio esterno fornisce il carico tramite un diodo.

L'anodo di questo diodo è connesso al polo +, il catodo è connesso al carico sul telaio. La corrente deve essere misurata.



ALIMENTAZIONE STAND-BY – LATO PRIMARIO

Cortocircuitare i piedini 3 e 4 di IP50 e accendere l'apparecchio con l'interruttore rete



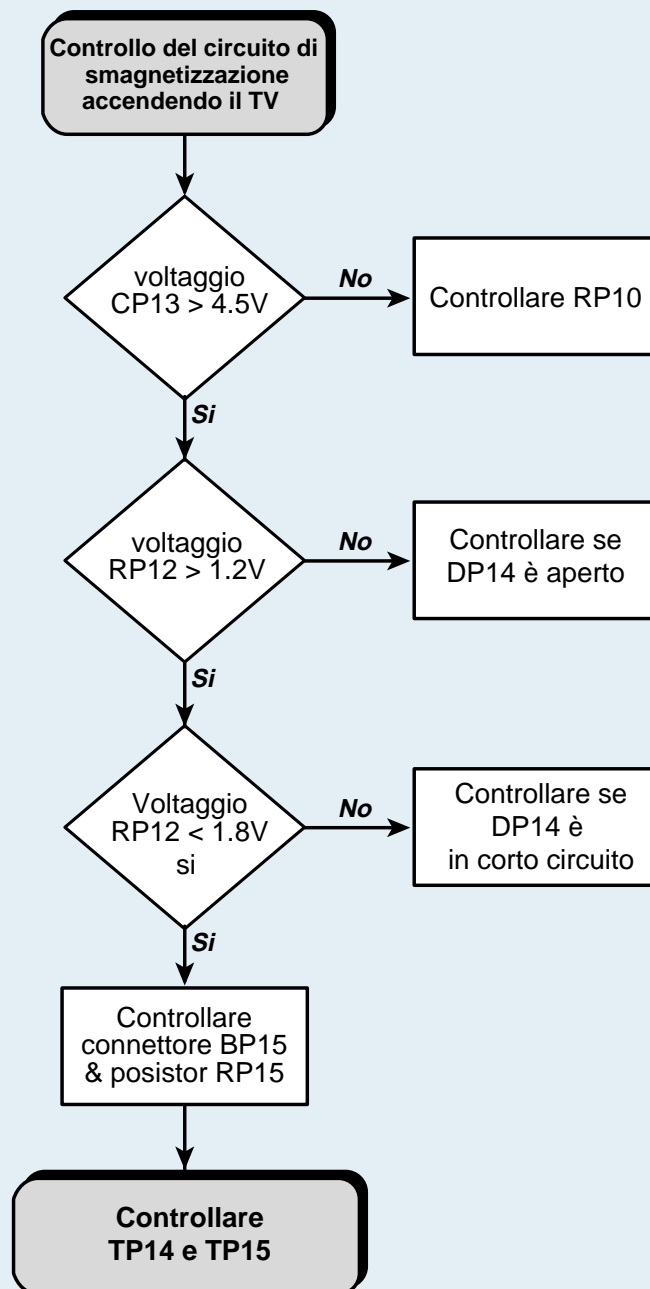
Generalità:

Tutte le misure devono essere prese con un trasformatore principale di separazione.

Informazione importante :

Se il circuito di sovraccarico era attivato, sostituite la resistenza fusibile nella posizione RB/LB06 sulla piastra CRT.

CIRCUITO DI SMAGNETIZZAZIONE



VOLTAJES DC SECUNDARIOS

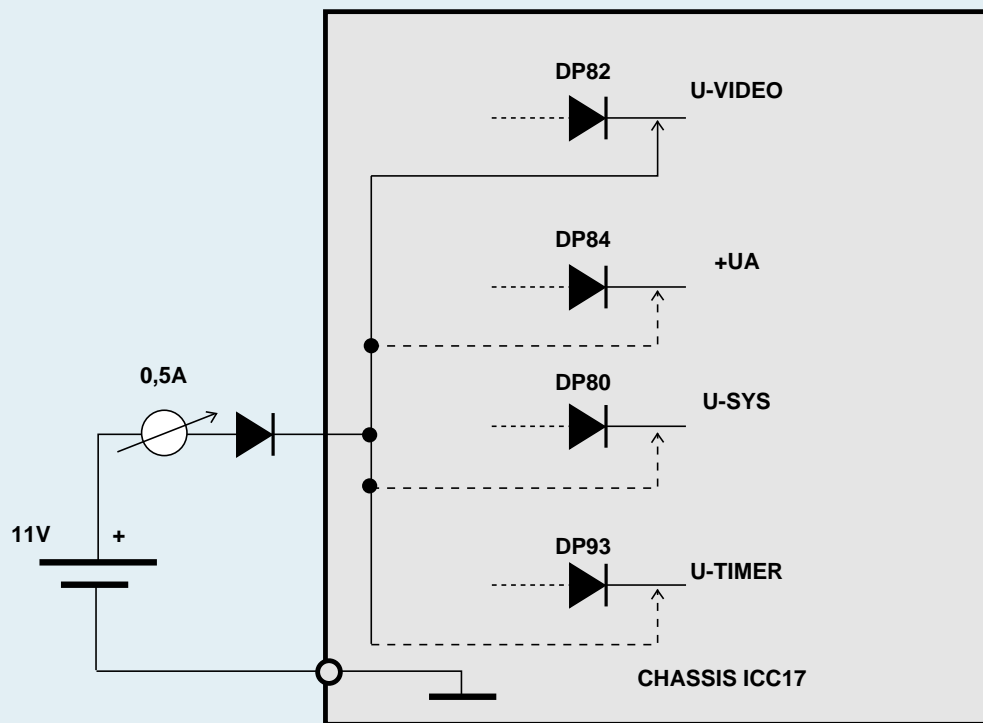
Todas las mediciones en este capítulo deberán hacerse SIN tensión de sector.

Test circuito:

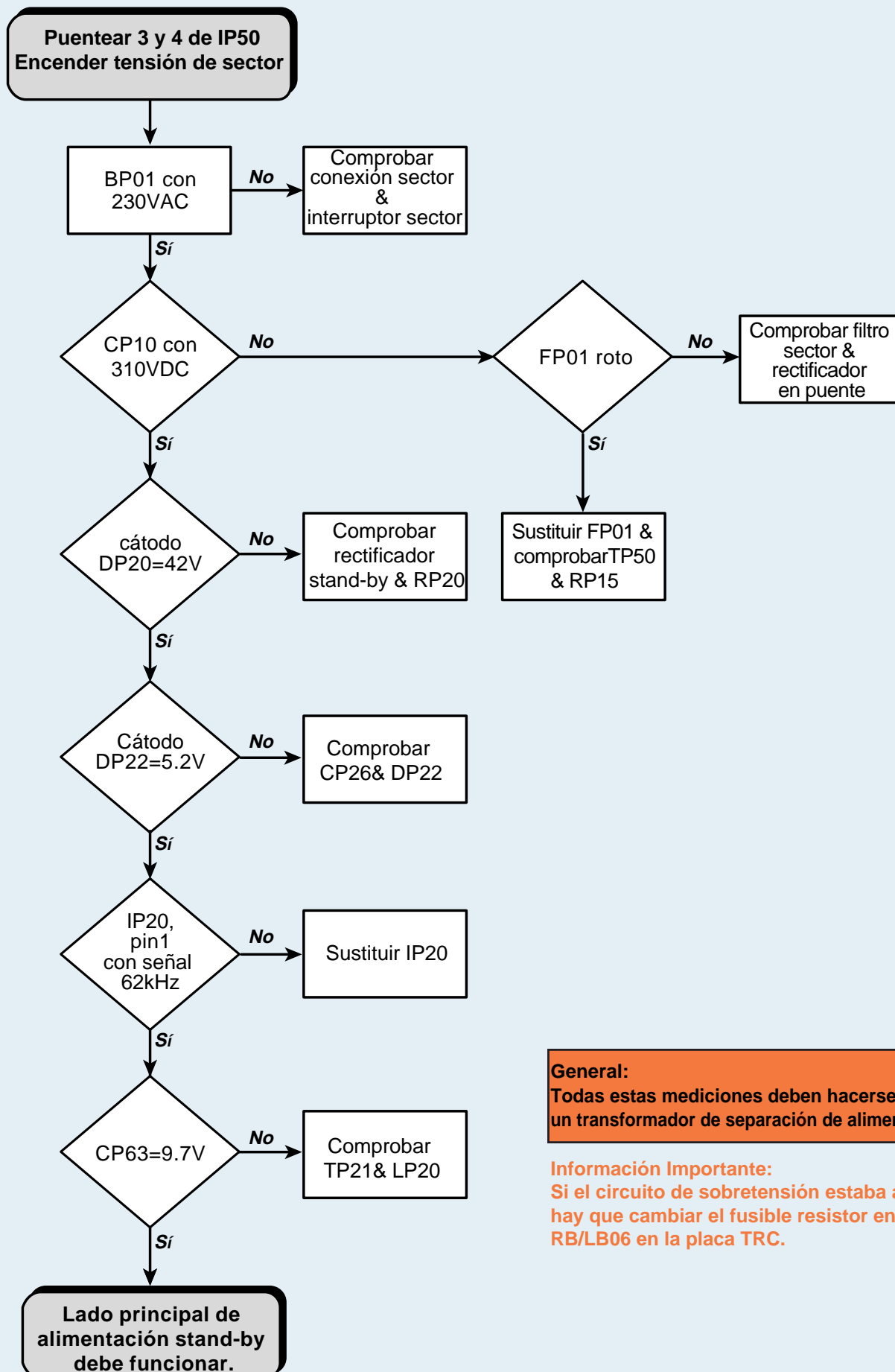
El voltaje externo es una alimentación DC externa con un voltaje ajustado de 11V y una limitación de corriente de 0.5A. El polo de la alimentación del voltaje externo debe estar directamente conectado a toma de tierra secundaria del chasis.

El polo+ de la alimentación del voltaje externo alimenta la carga a través de un diodo.

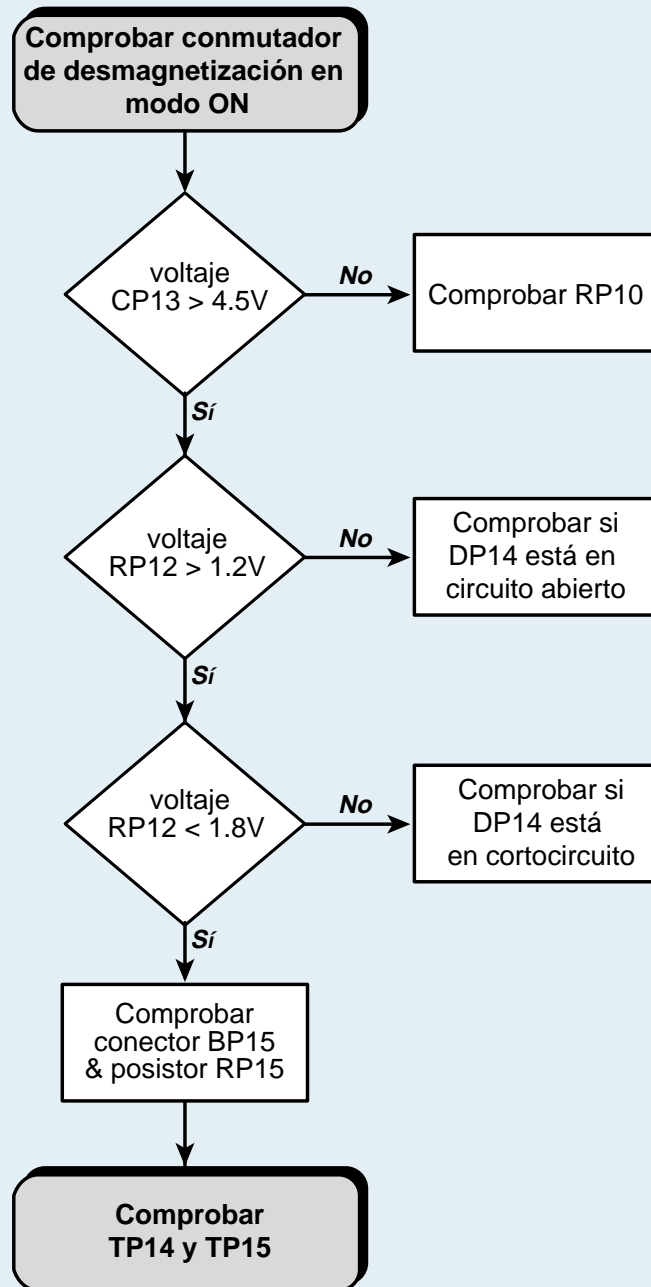
El ánodo del diodo está conectado al polo+, el cátodo de este diodo está conectado a la carga en el chasis. La corriente debe ser medida.



ALIMENTACION STAND BY – LADO PRINCIPAL



CIRCUITO DE DESMAGNETIZACION

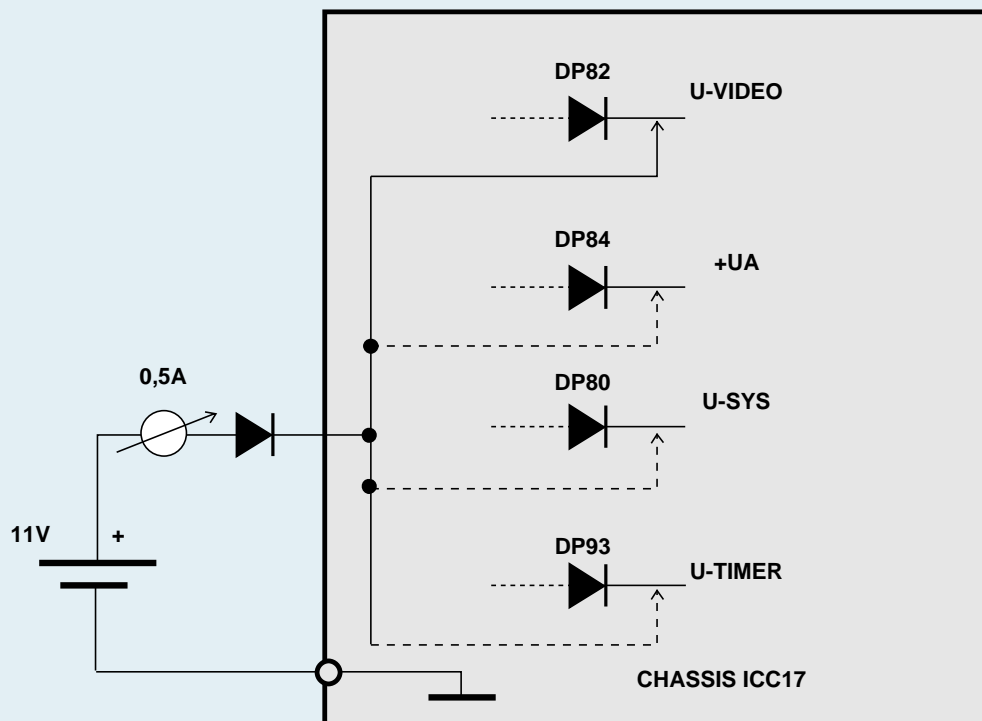


SECONDARY DC-VOLTAGES

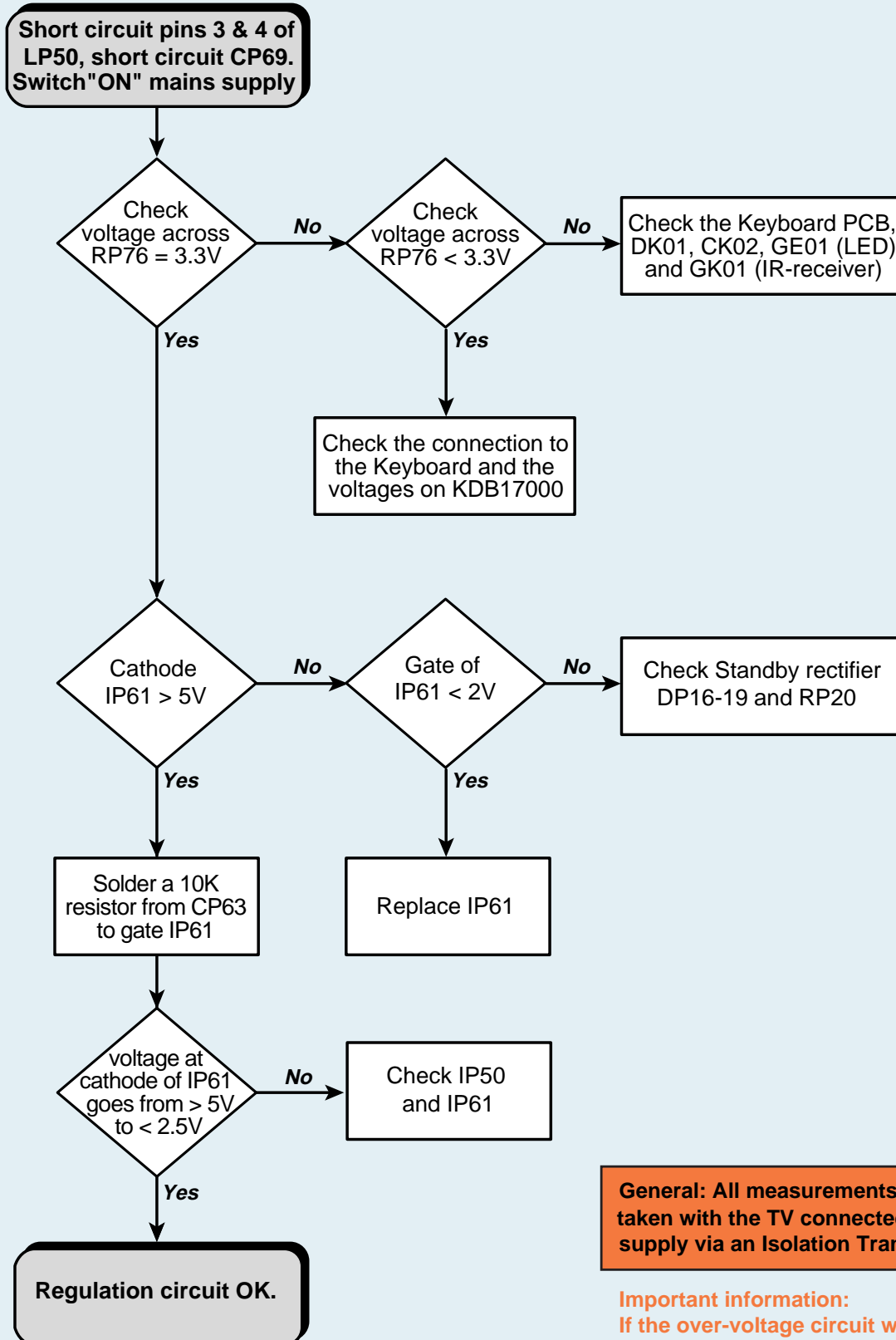
All measurements in this chapter must be done WITHOUT the mains supply connected to the TV.

Test circuit:

The external voltage source is provided by a variable DC-power supply with its output voltage set to 11V and the current limitation set to 500mA's. The negative terminal of the DC-power supply must be directly connected to the chassis secondary ground plane. The positive terminal of the DC-power supply is first connected to an ammeter and then the anode of an isolation diode. The cathode of the isolation diode is then connected to the load on the chassis as shown below. Measure the current drawn by each load tested.



STANDBY POWER SUPPLY - SECONDARY SIDE

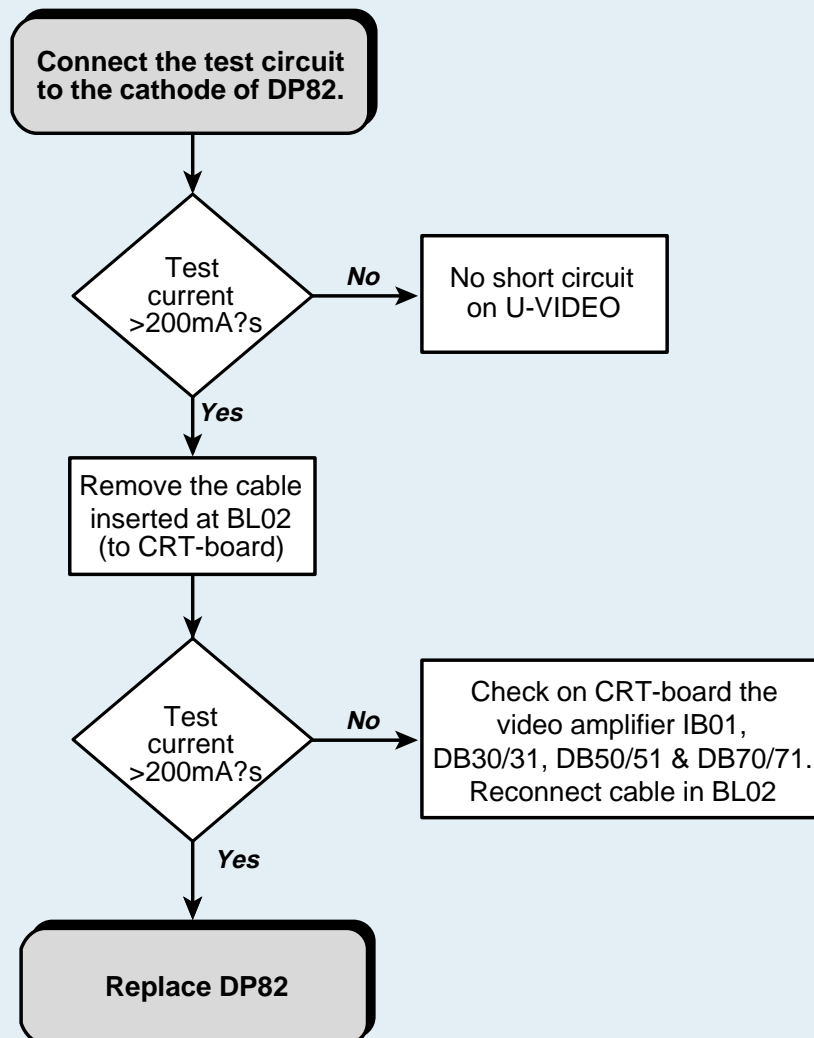


General: All measurements must be taken with the TV connected to the mains supply via an Isolation Transformer.

Important information:
If the over-voltage circuit was activated, you have to replace the fuse resistor at location RB/LB06 on the CRT-board.

After finishing this test, please remove the short circuits from pins 3/4 of LP50 and CP69 also remove the 10k resistor.

POWER SUPPLY - SECONDARY SIDE : U-VIDEO

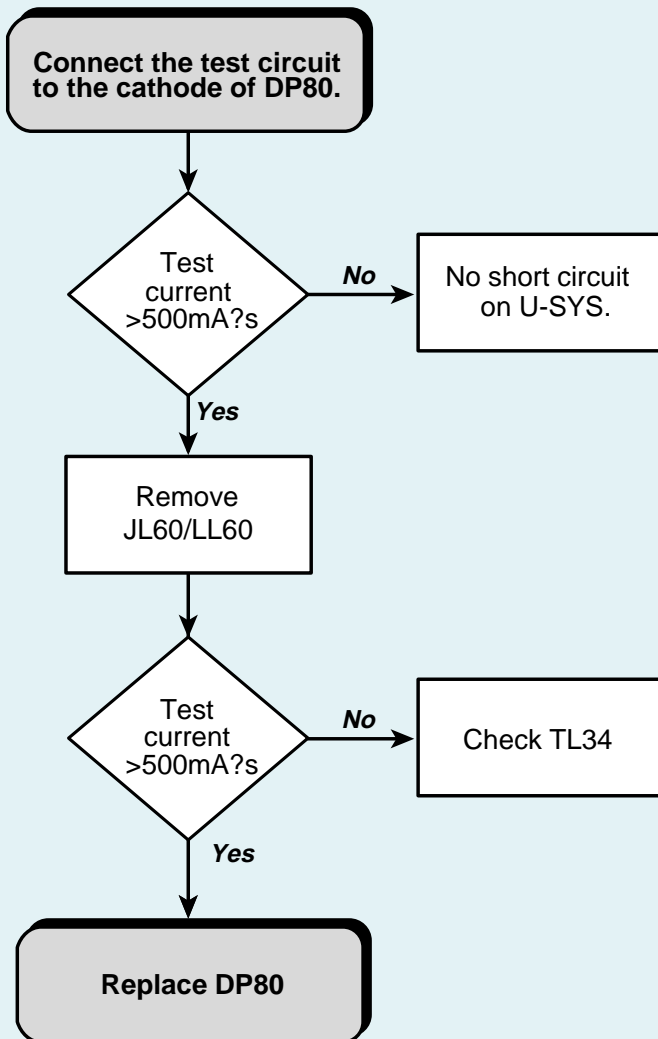


After finishing this test, please replace cable BL02 and remove the test circuit.

General: All measurements must be taken with the TV connected to the mains supply via an Isolation Transformer.

Important information:
If the over-voltage circuit was activated, you have to replace the fuse resistor at location RB/LB06 on the CRT-board.

POWER SUPPLY - SECONDARY SIDE : U-SYS

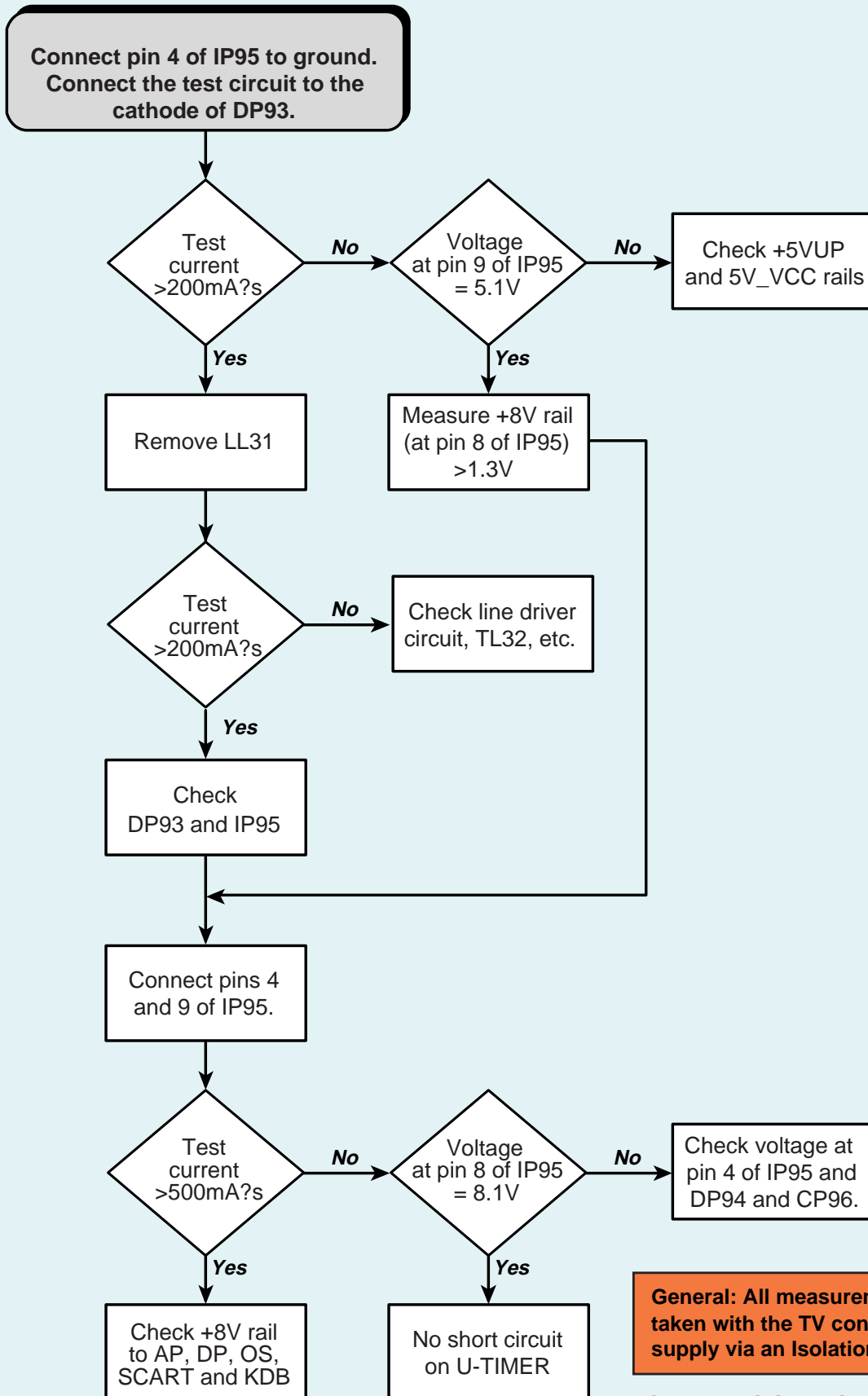


After finishing this test, please replace JL60/LL60 and remove the test circuit.

General: All measurements must be taken with the TV connected to the mains supply via an Isolation Transformer.

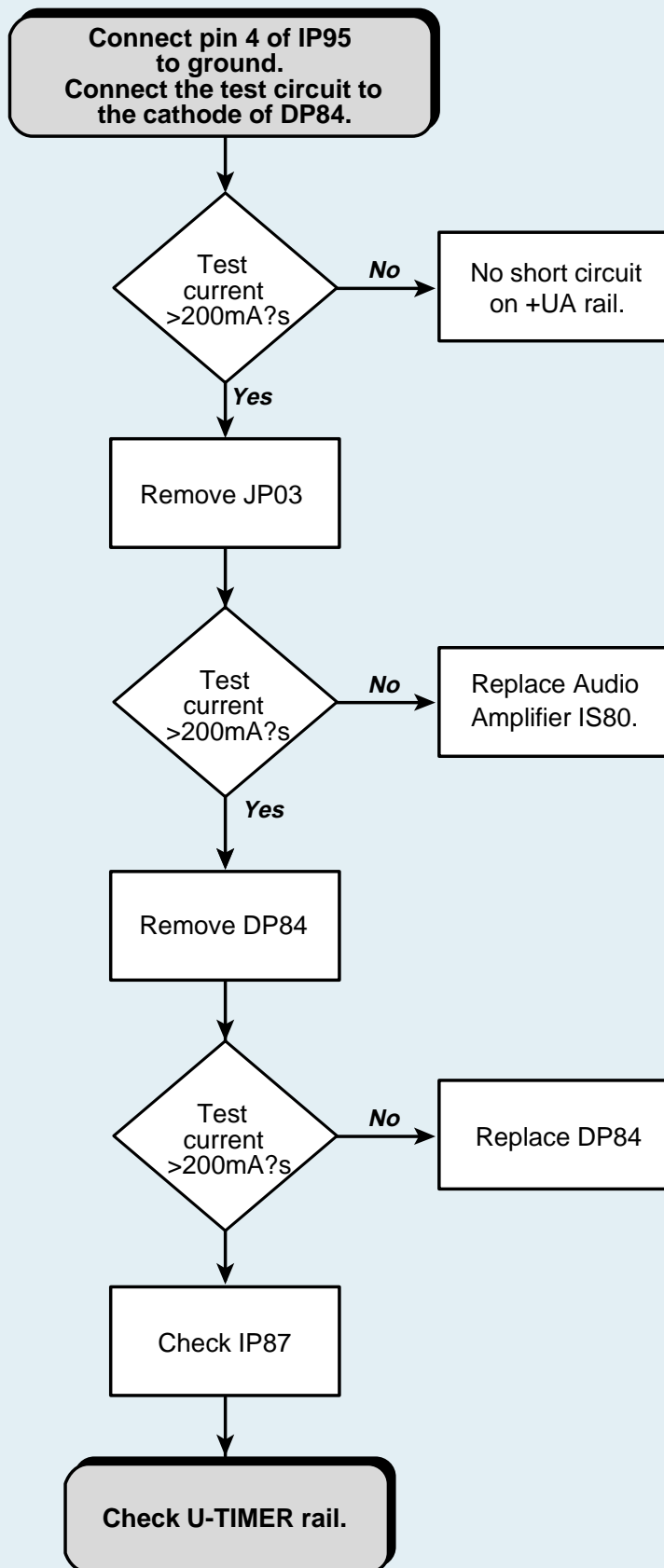
Important information:
If the over-voltage circuit was activated, you have to replace the fuse resistor at location RB/LB06 on the CRT-board.

POWER SUPPLY - SECONDARY SIDE : U-TIMER



Important information:
If the over-voltage circuit was activated, you have to replace the fuse resistor at location RB/LB06 on the CRT-board.

POWER SUPPLY - SECONDARY SIDE : +UA



General: All measurements must be taken with the TV connected to the mains supply via an Isolation Transformer.

Important information:
If the over-voltage circuit was activated, you have to replace the fuse resistor at location RB/LB06 on the CRT-board.

TENSIONS SECONDAIRES

Toutes les mesures de ce chapitre doivent être effectuées SANS alimentation secteur.
Utiliser une Alimentation continue externe

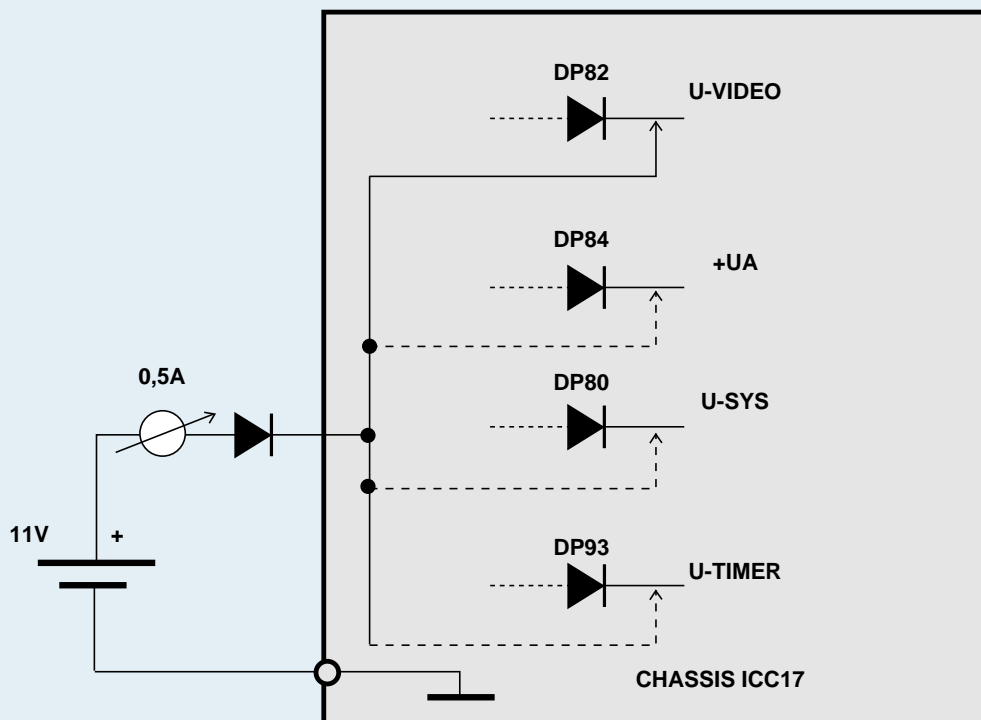
Circuit Test:

L'alimentation externe est une alimentation continue de 11V réglable avec un courant de limitation de 0.5A.

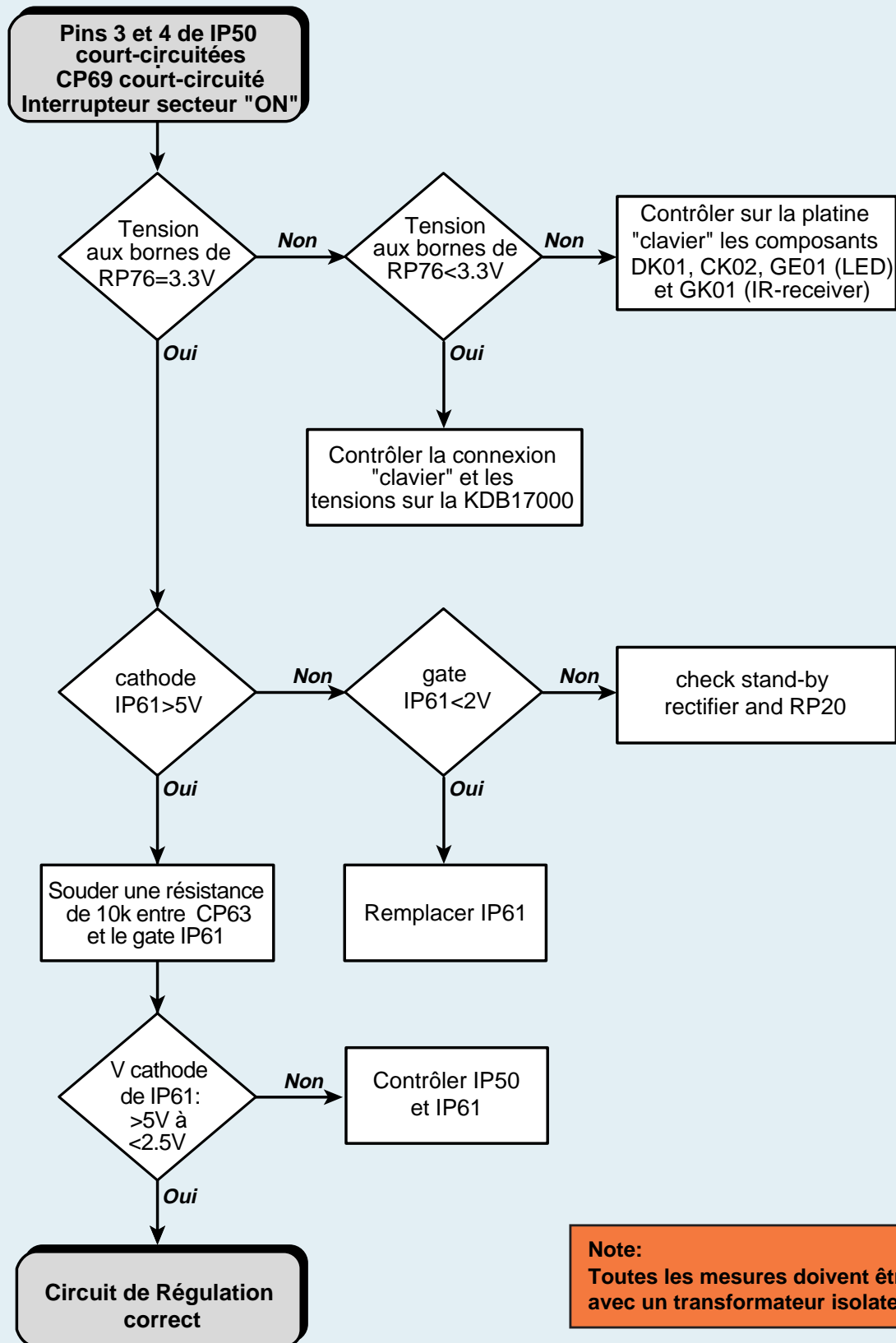
Le pôle - est relié à la masse secondaire du chassis.

Le pôle + de l'alimentation externe sera réunie à travers une diode, aux circuits de charge indiqués en début d'organigramme.(voir schéma ci-contre).

Le courant de charge devra être mesuré.



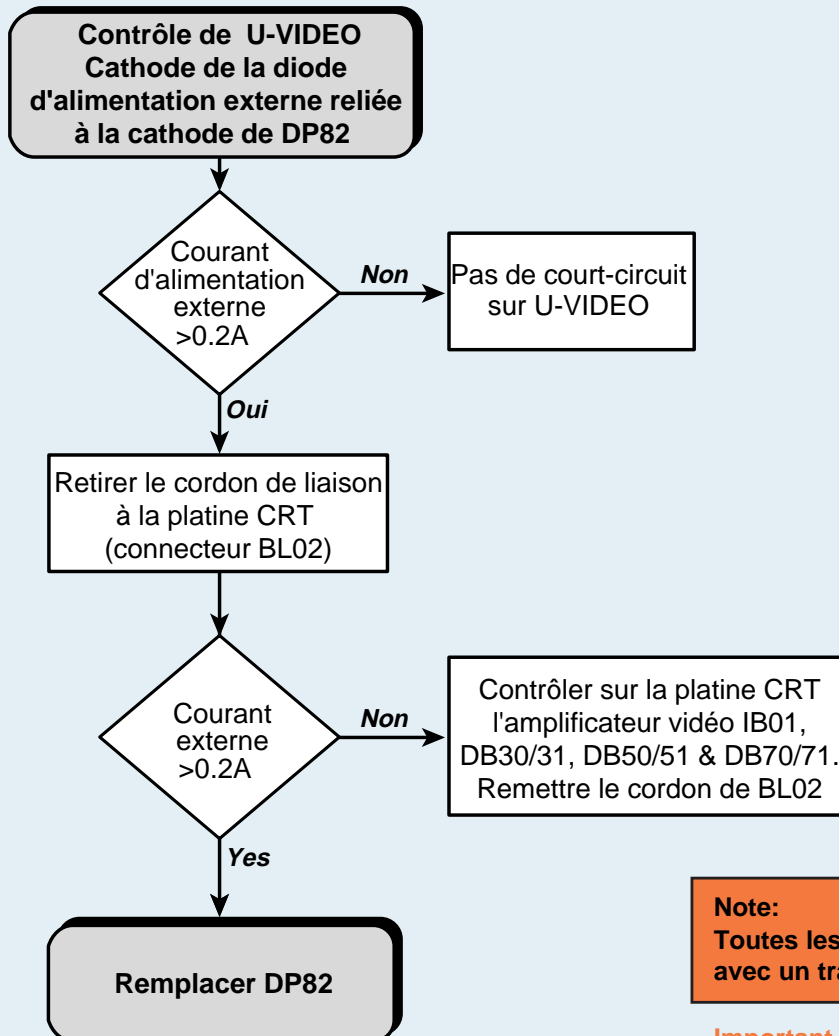
ALIMENTATION STANDBY - PARTIE SECONDAIRE



Après les tests remettre les circuits dans leur configuration d'origine ,
Exemple : Retirer la résistance de 10k et les court-circuits au niveau de CP69 et de IP50.

Important :
Si le circuit de protection contre les sur-tensions est actif remplacer la résistance fusible RB/LB06 de la platine CRT.

ALIMENTATION - PARTIE SECONDAIRE : U-VIDEO

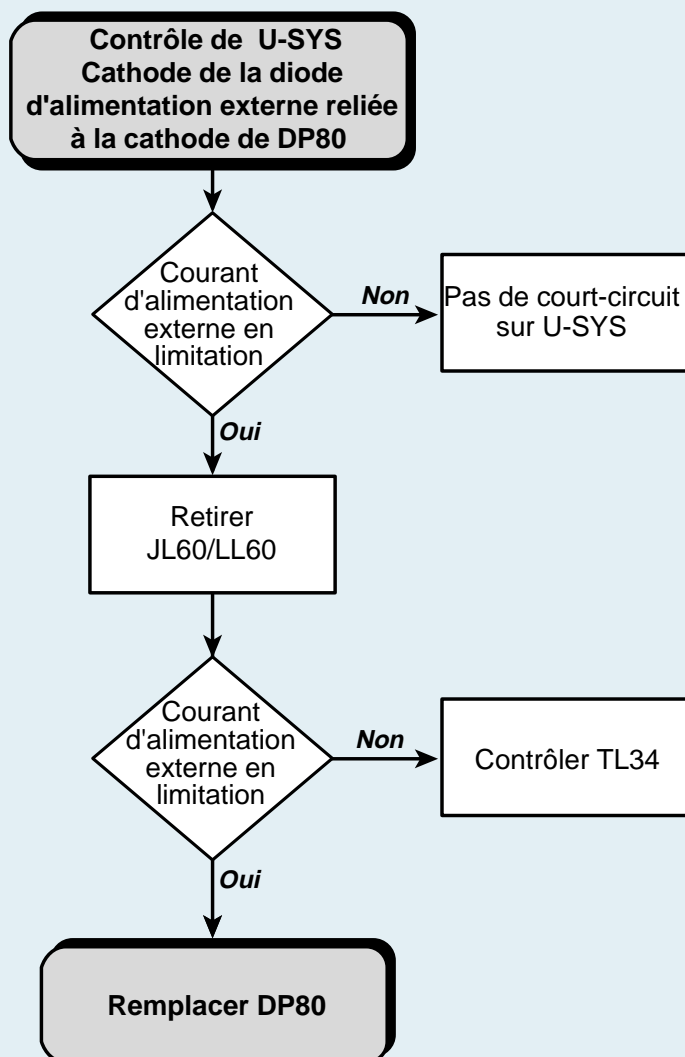


Après les tests remettre les circuits dans leur configuration d'origine.
Exemple : Remettre le câble de liaison à la CRT : BL02

Note:
Toutes les mesures doivent être effectuées avec un transformateur isolateur du secteur

Important :
Si le circuit de protection contre les sur-tensions est actif remplacer la résistance fusible RB/LB06 de la platine CRT.

ALIMENTATION - PARTIE SECONDAIRE : U-SYS



Après les tests remettre les circuits dans leur configuration d'origine.
Exemple : JL60 / LL60

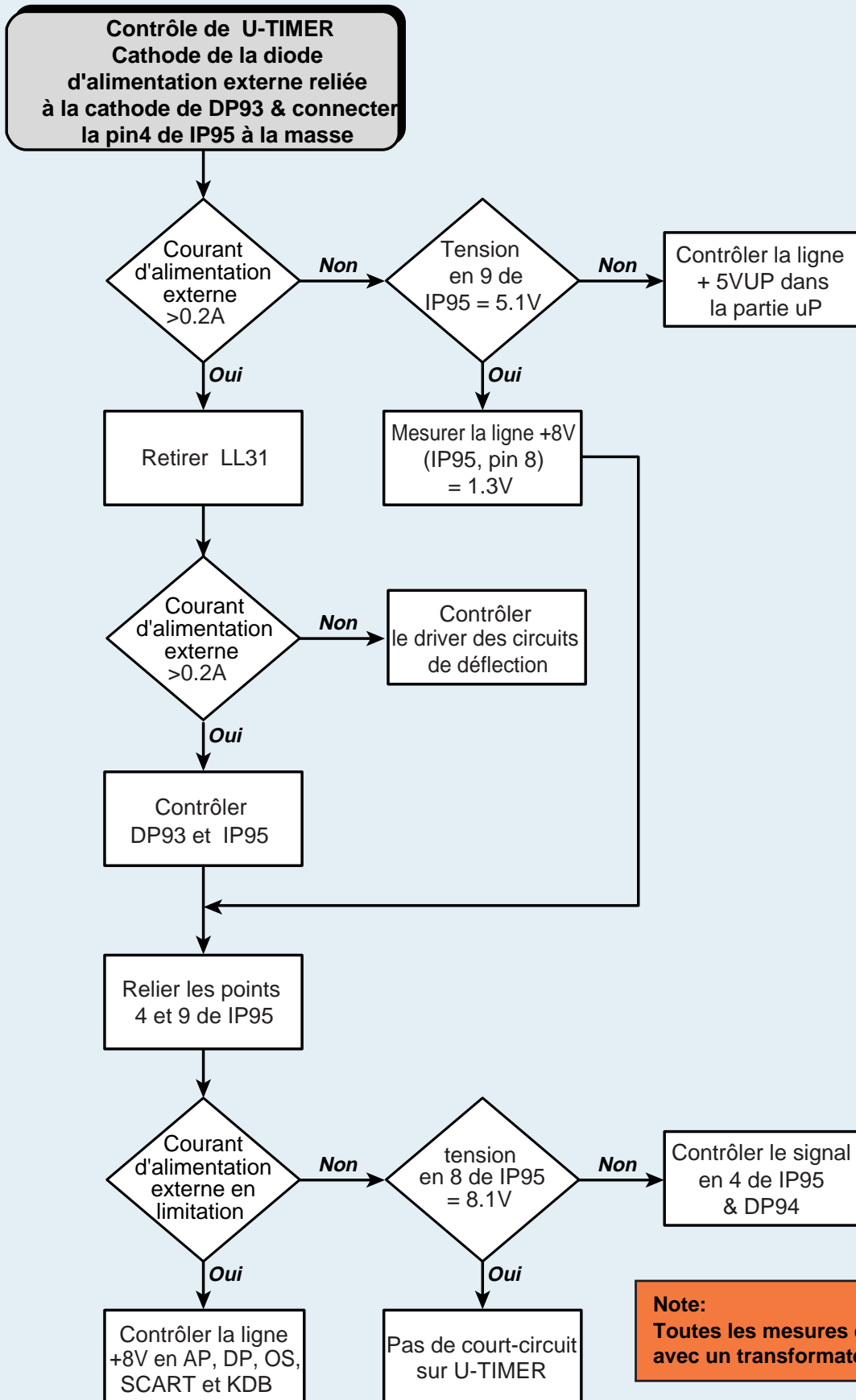
Note:

Toutes les mesures doivent être effectuées avec un transformateur isolateur du secteur

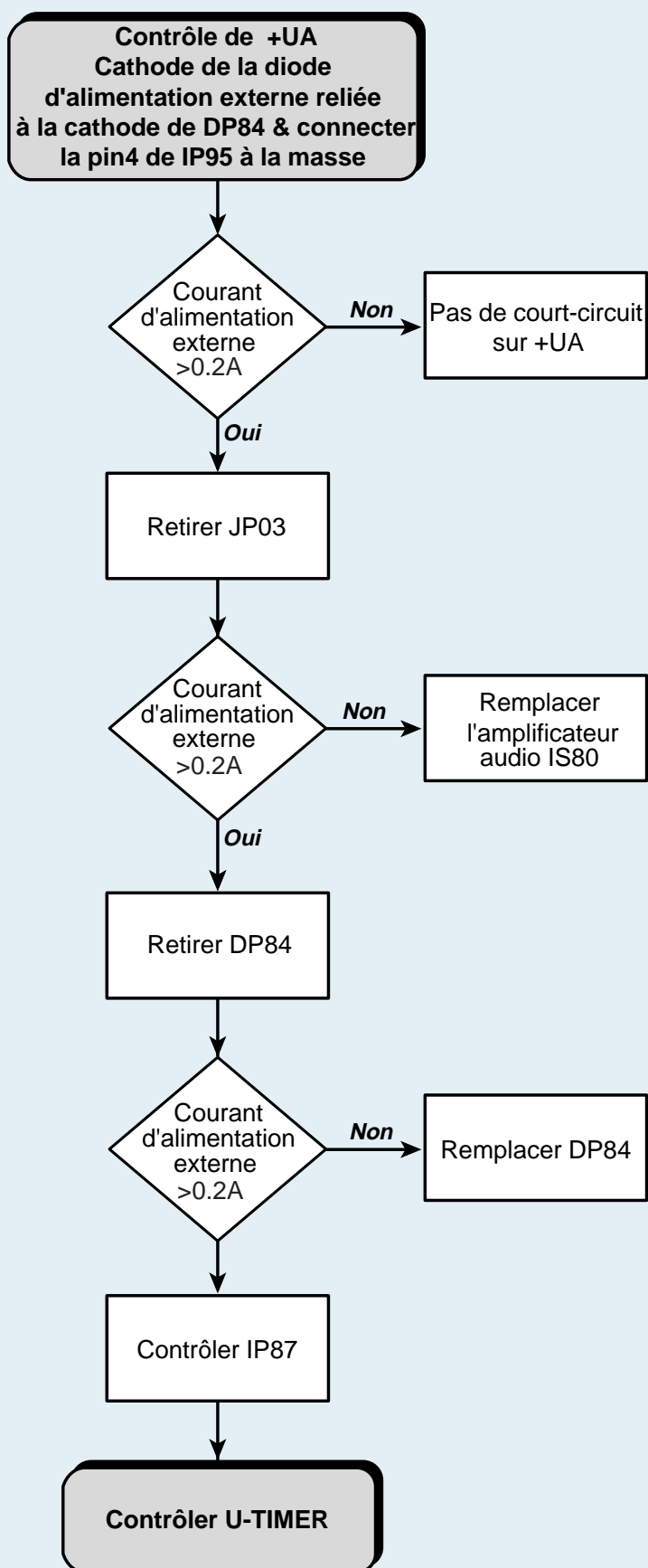
Important :

Si le circuit de protection contre les sur-tensions est actif remplacer la résistance fusible RB/LB06 de la platine CRT.

ALIMENTATION - PARTIE SECONDAIRE : U-TIMER



ALIMENTATION - PARTIE SECONDAIRE : +UA



Après les tests remettre les circuits dans leur configuration d'origine.
Exemple : JP03.

Note:

Toutes les mesures doivent être effectuées avec un transformateur isolateur du secteur

Important :

Si le circuit de protection contre les sur-tensions est actif remplacer la résistance fusible RB/LB06 de la platine CRT.

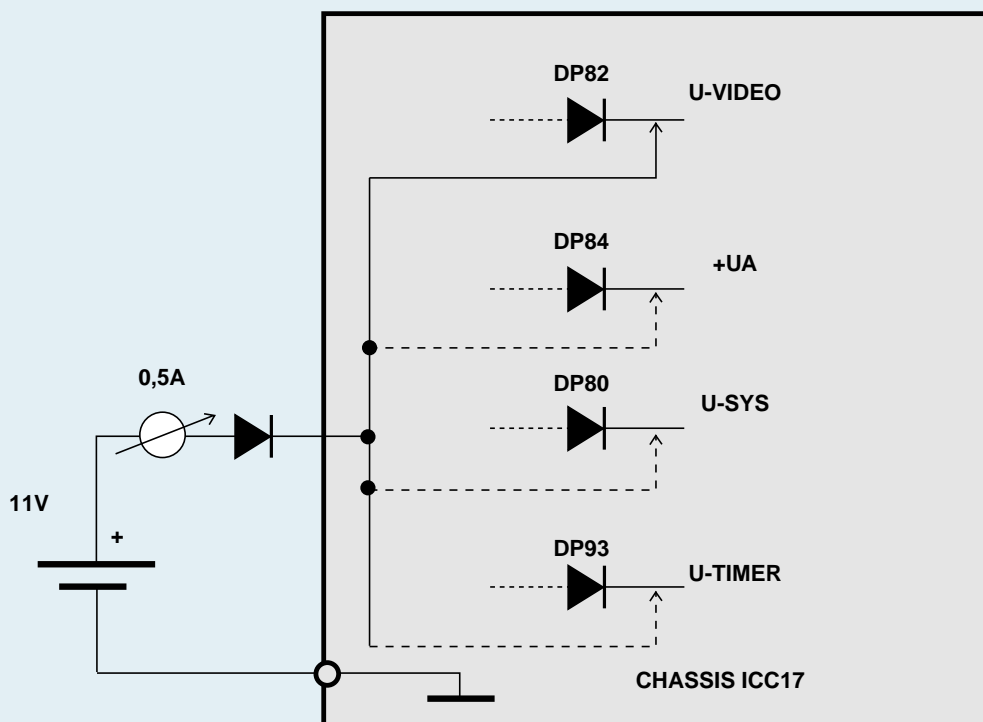
ÜBERPRÜFUNG DER SEKUNDÄRSEITIGEN GLEICHSPANNUNGEN

Alle Messungen in diesem Kapitel müssen ohne Netzspannung vorgenommen werden. Benutzen Sie die Testschaltung.

Testschaltung:

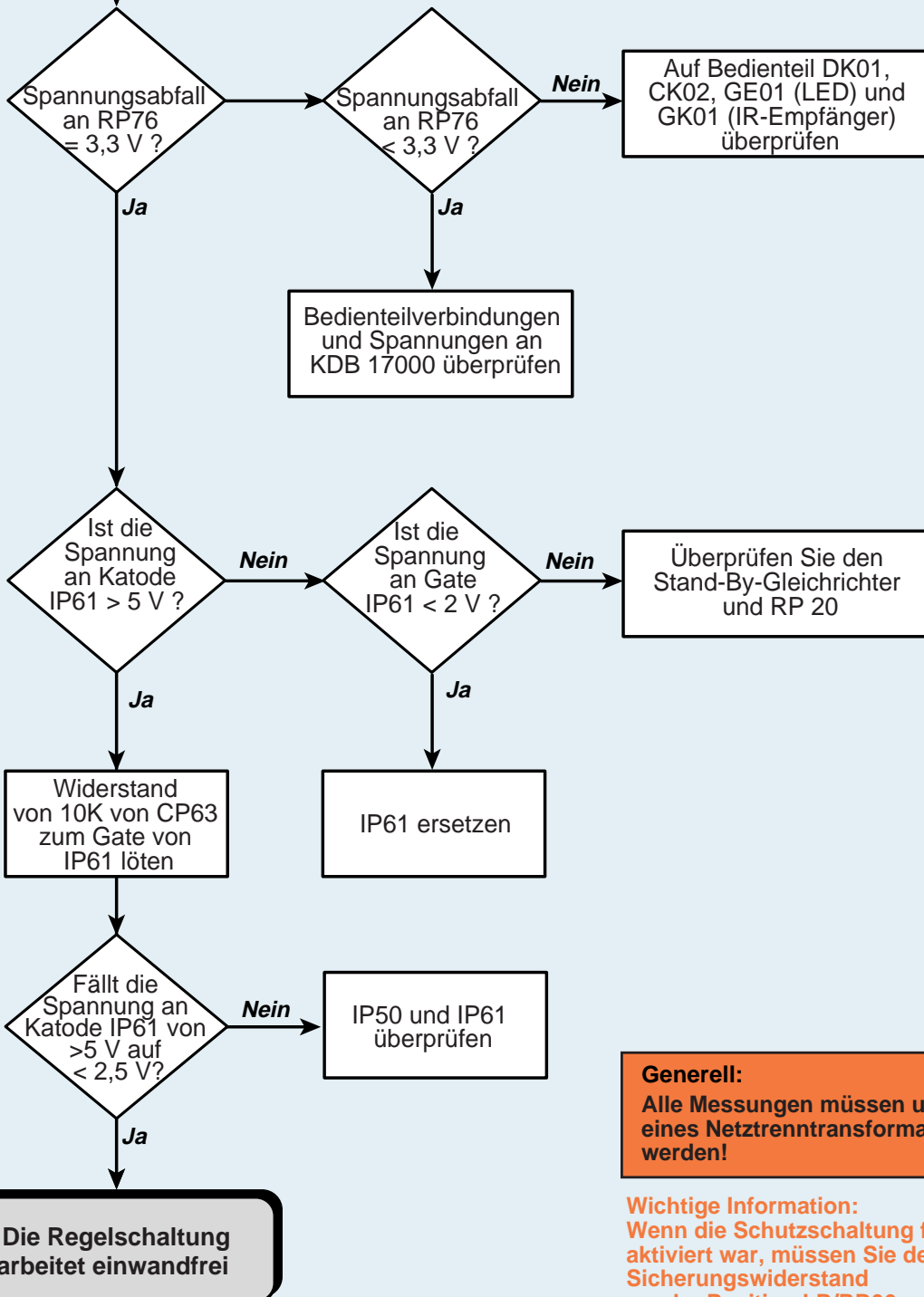
Die externe Spannung ist an ein externes Netzteil mit einer eingestellten Spannung von 11 V und einer Strombegrenzung von 0,5 A angeschlossen

Der Minuspol der externen Spannungsquelle wird direkt mit der Masse des sekundären Netzteils verbunden! Der Pluspol der externen Spannungsquelle wird über eine Diode eingespeist, wobei die Anode dieser Diode mit dem Pluspol verbunden ist. Die Katode ist mit dem entsprechenden Einspeisepunkt auf dem Chassis verbunden. Der Strom muß gemessen werden.



STANDBY-BY NETZTEIL SEKUNDÄRSEITE

IP 50 an Pin 3 und 4,
sowie CP69 kurzschließen.
Gerät mit Hauptschalter
einschalten



Nach Beendigung der Überprüfung alle Modifikationen
rückgängig machen, z. B. CP69, IP50, 10K.

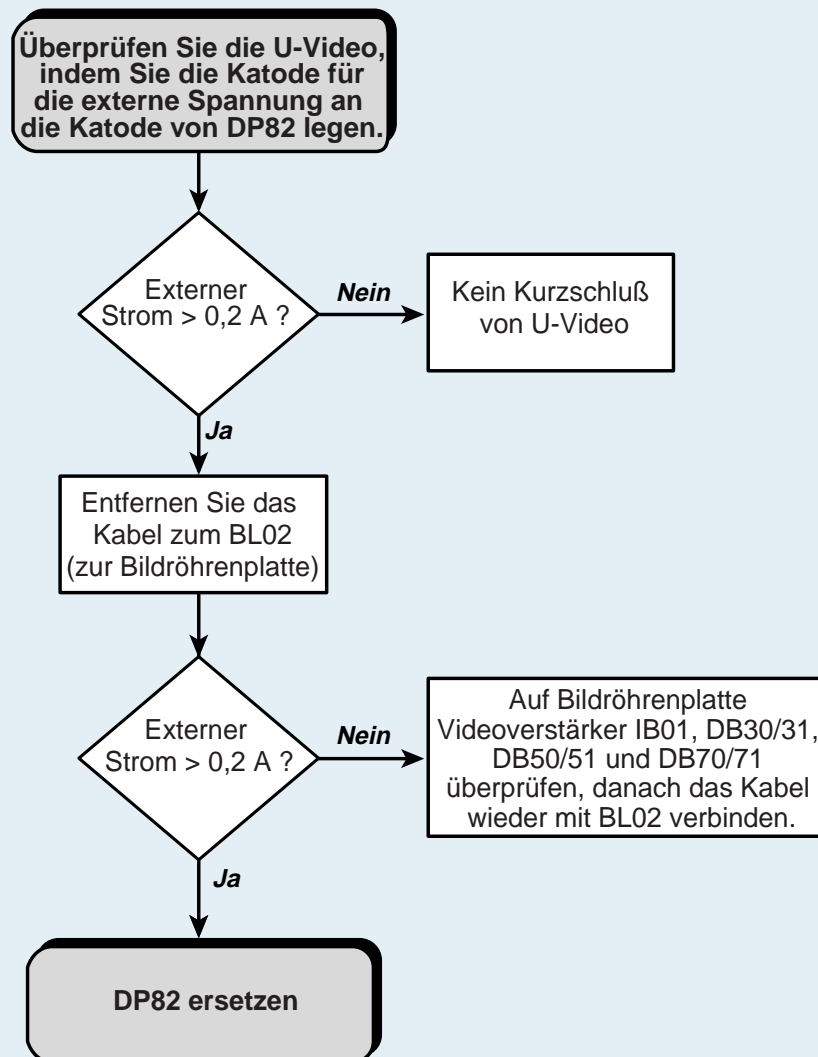
Generell:

Alle Messungen müssen unter Verwendung
eines Netztrenntransformators vorgenommen
werden!

Wichtige Information:

Wenn die Schutzschaltung für Überspannung
aktiviert war, müssen Sie den
Sicherungswiderstand
an der Position LB/RB06 auf der Bildrohrplatte
ersetzen!

HAUPTNETZTEIL SEKUNDÄRSEITE: VIDEOSPANNUNG U-VIDEO



Nach Beendigung der Überprüfung alle Modifikationen rückgängig machen, z. B. BL02!

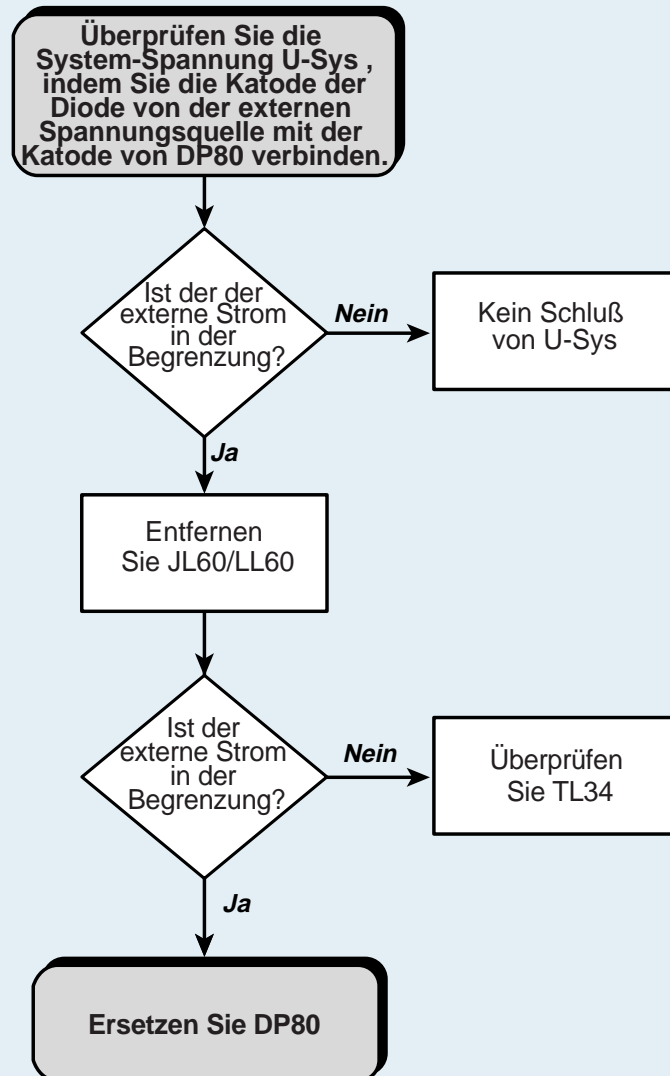
Generell:

Alle Messungen müssen unter Verwendung eines Netztrenntransformators vorgenommen werden!

Wichtige Information:

Wenn die Schutzschaltung für Überspannung aktiviert war, müssen Sie den Sicherungswiderstand an der Position LB/RB06 auf der Bildrohrplatte ersetzen!

HAUPTNETZTEIL SEKUNDÄRSEITE: SYSTEM-SPANNUNG U-SYS



Nach Beendigung der Überprüfung alle Modifikationen rückgängig machen, z. B. JL60/LL60

Generell:

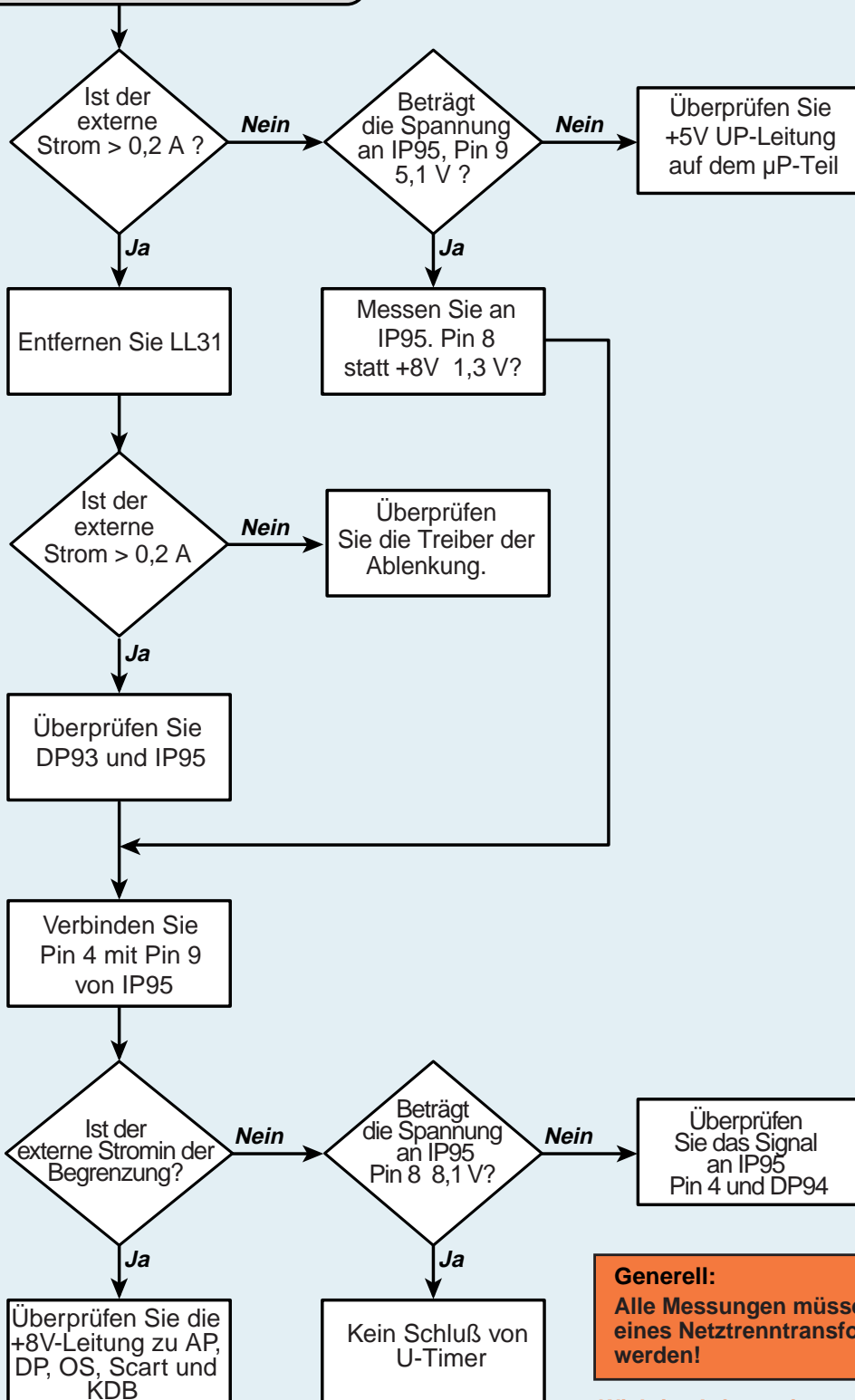
Alle Messungen müssen unter Verwendung eines Netztrenntransformators vorgenommen werden!

Wichtige Information:

Wenn die Schutzschaltung für Überspannung aktiviert war, müssen Sie den Sicherungswiderstand an der Position LB/RB06 auf der Bildrohrplatte ersetzen!

HAUPTNETZTEIL SEKUNDÄRSEITE: TIMER-SPANNUNG U-TIMER

Überprüfen Sie die Timer-Spannung, indem Sie die Katode der Diode von der externen Spannungsquelle mit der Katode von DP93 verbinden und IP95 Pin 4 an Masse legen



Nach Beendigung der Überprüfung alle Modifikationen rückgängig machen, z. B. LL31

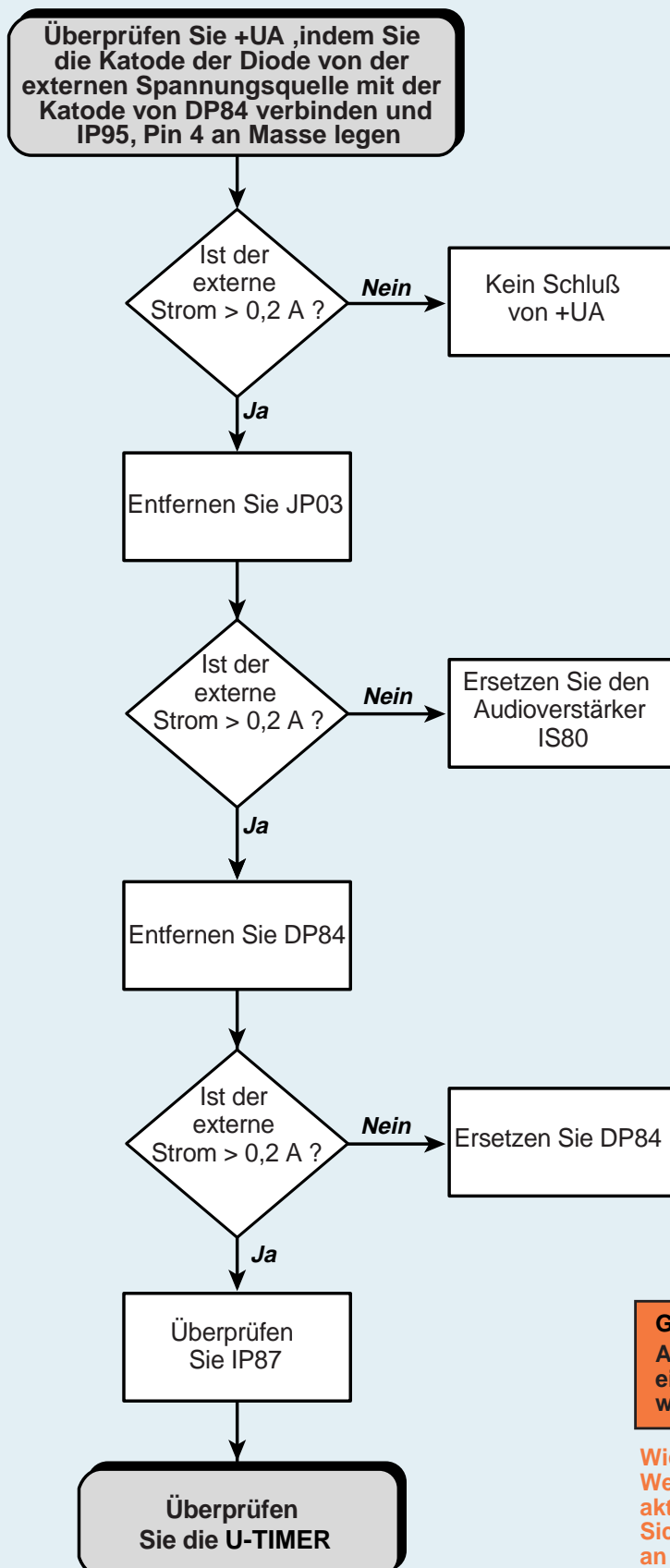
Generell:

Alle Messungen müssen unter Verwendung eines Netztrenntransformators vorgenommen werden!

Wichtige Information:

Wenn die Schutzschaltung für Überspannung aktiviert war, müssen Sie den Sicherungswiderstand an der Position LB/RB06 auf der Bildrohrplatte ersetzen!

HAUPTNETZTEIL SEKUNDÄRSEITE: SPANNUNG +UA



Generell:

Alle Messungen müssen unter Verwendung eines Netztrenntransformators vorgenommen werden!

Wichtige Information:

Wenn die Schutzschaltung für Überspannung aktiviert war, müssen Sie den Sicherungswiderstand an der Position LB/RB06 auf der Bildrohrplatte ersetzen!

VOLTAGGI DC SECONDARI

Tutte le misurazioni in questo capitolo dovrebbero essere fatte SENZA i voltaggi principali.

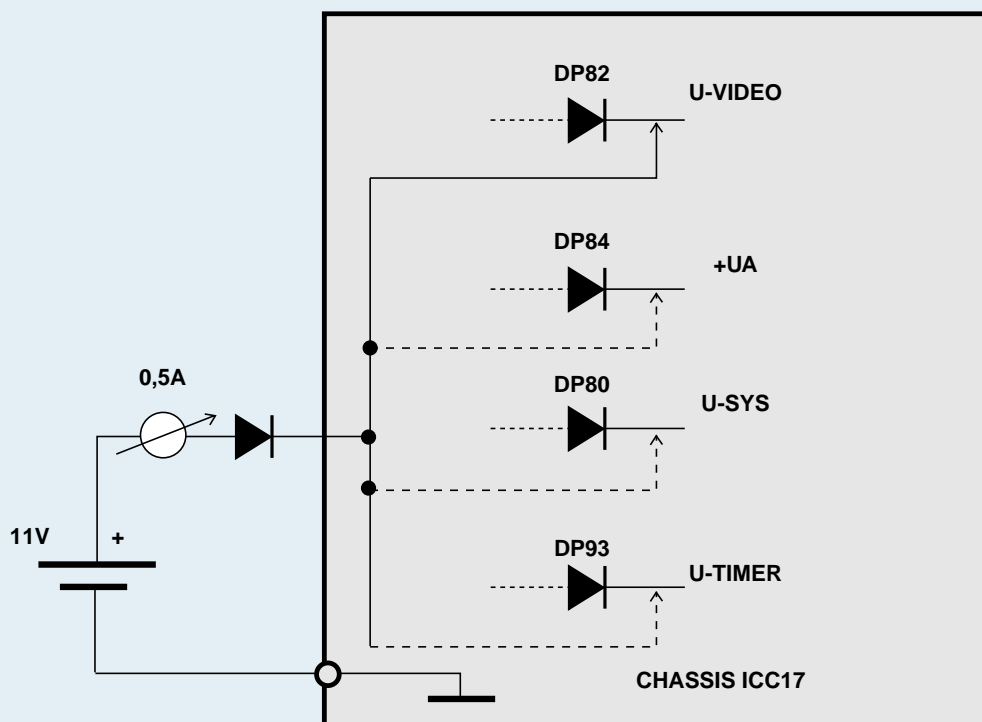
Test del circuito:

il voltaggio esterno è una fornitura d'energia esterna DC con un voltaggio regolato di 11V e una limitazione di corrente a 0,5A.

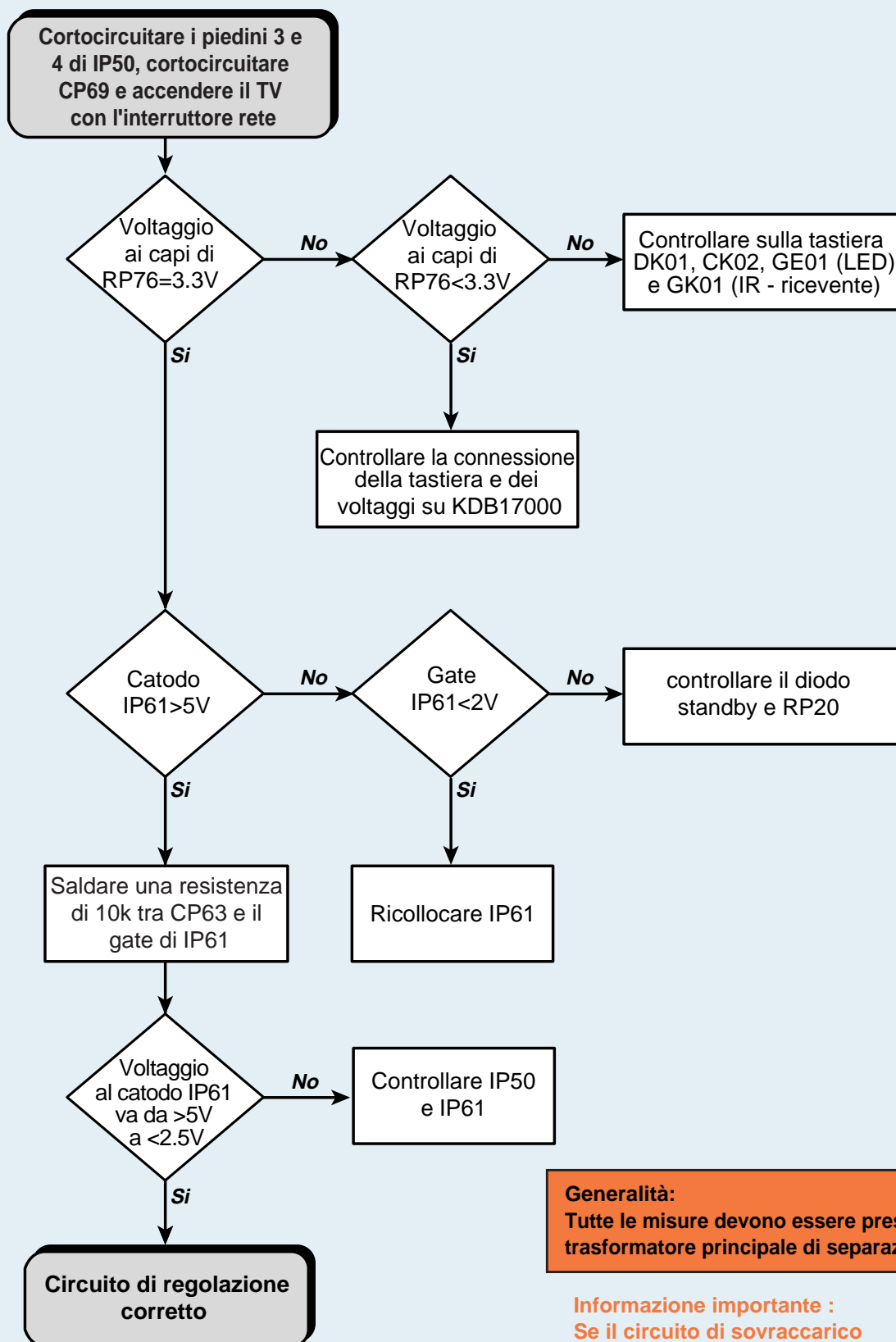
Il polo della fornitura del voltaggio esterno deve essere direttamente connesso al campo secondario del telaio.

Il polo + della fornitura del voltaggio esterno fornisce il carico tramite un diodo.

L'anodo di questo diodo è connesso al polo +, il catodo è connesso al carico sul telaio. La corrente deve essere misurata.

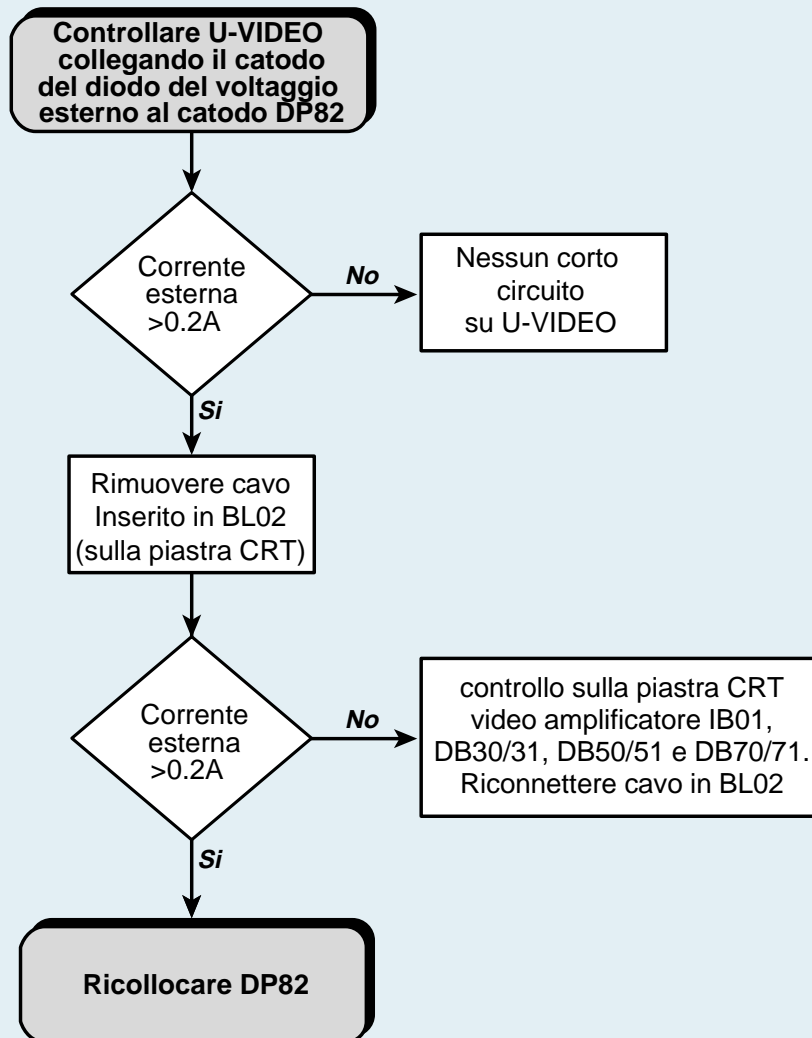


ALIMENTAZIONE STANDBY – LATO SECONDARIO



Alla fine, riportare il circuito all'origine (togliere la resistenza di 10k e i cortocircuiti di CP69, IP50).

ALIMENTAZIONE – LATO SECONDARIO : U-VIDEO



Alla fine, riportare il circuito all'origine. Es: collegare il cavo in BL02

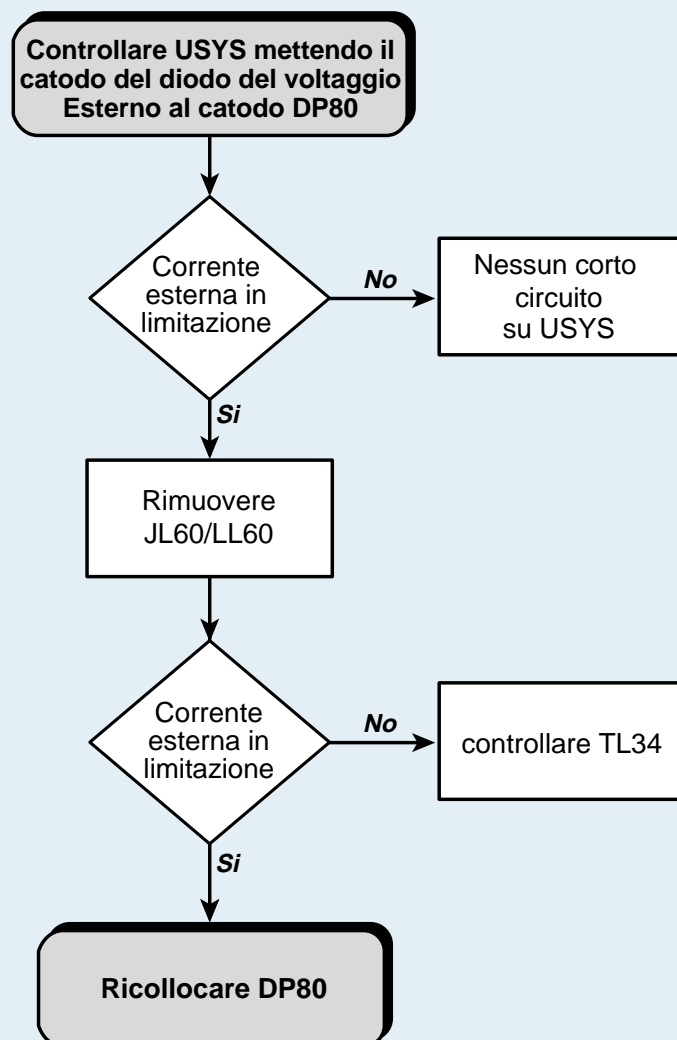
Generalità:

Tutte le misure devono essere prese con un trasformatore principale di separazione.

Informazione importante :

Se il circuito di sovraccarico era attivato, sostituire la resistenza fusibile nella posizione RB/LB06 sulla piastra CRT.

ALIMENTAZIONE – LATO SECONDARIO : U-SYS



Alla fine, riportare il circuito all'origine (modificare JL60/LL60)

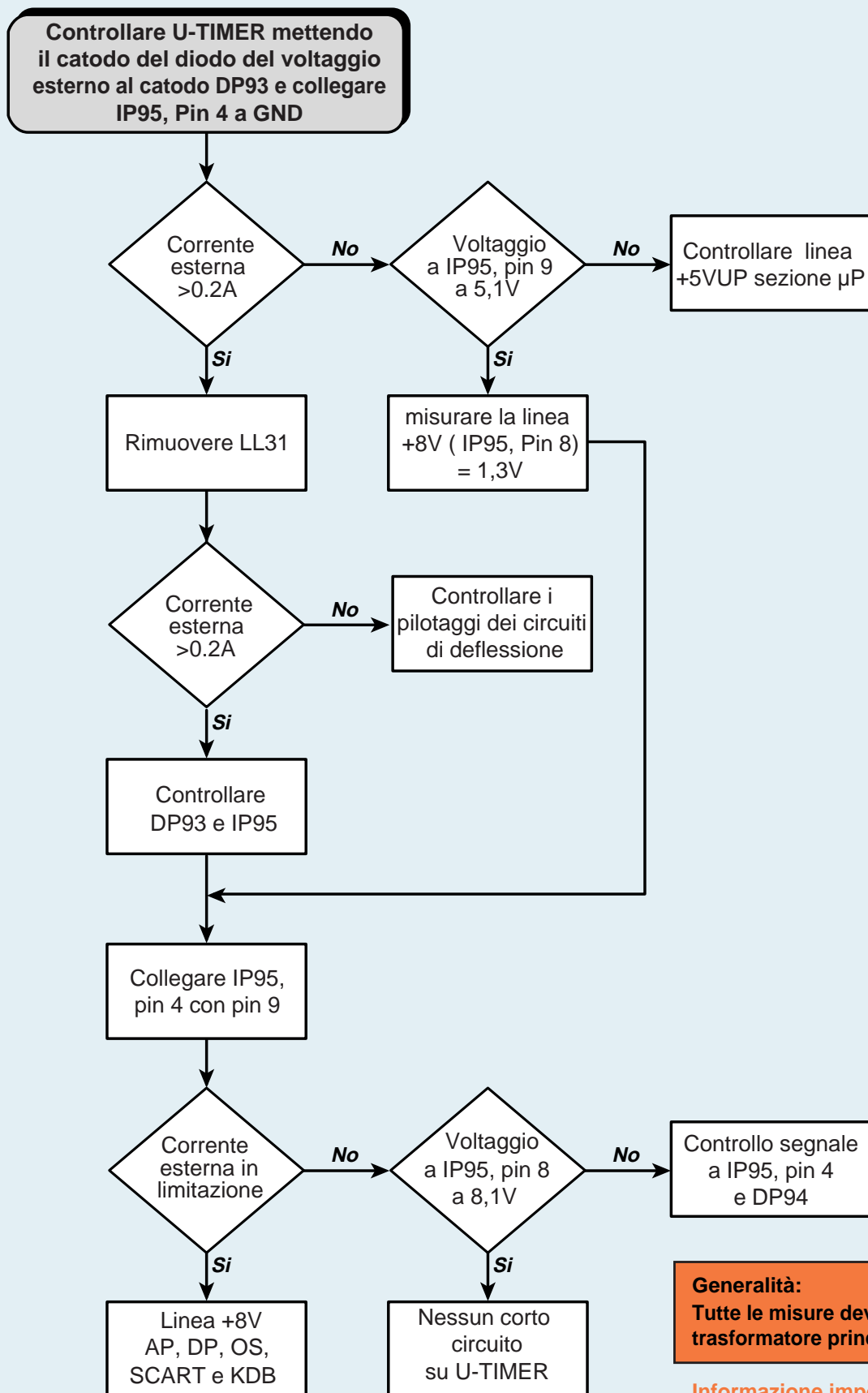
Generalità:

Tutte le misure devono essere prese con un trasformatore principale di separazione.

Informazione importante :

Se il circuito di sovraccarico era attivato, sostituite la resistenza fusibile nella posizione RB/LB06 sulla piastra CRT.

ALIMENTAZIONE – LATO SECONDARIO : U-TIMER



Alla fine, riportare il circuito all'origine (modificare LL31)

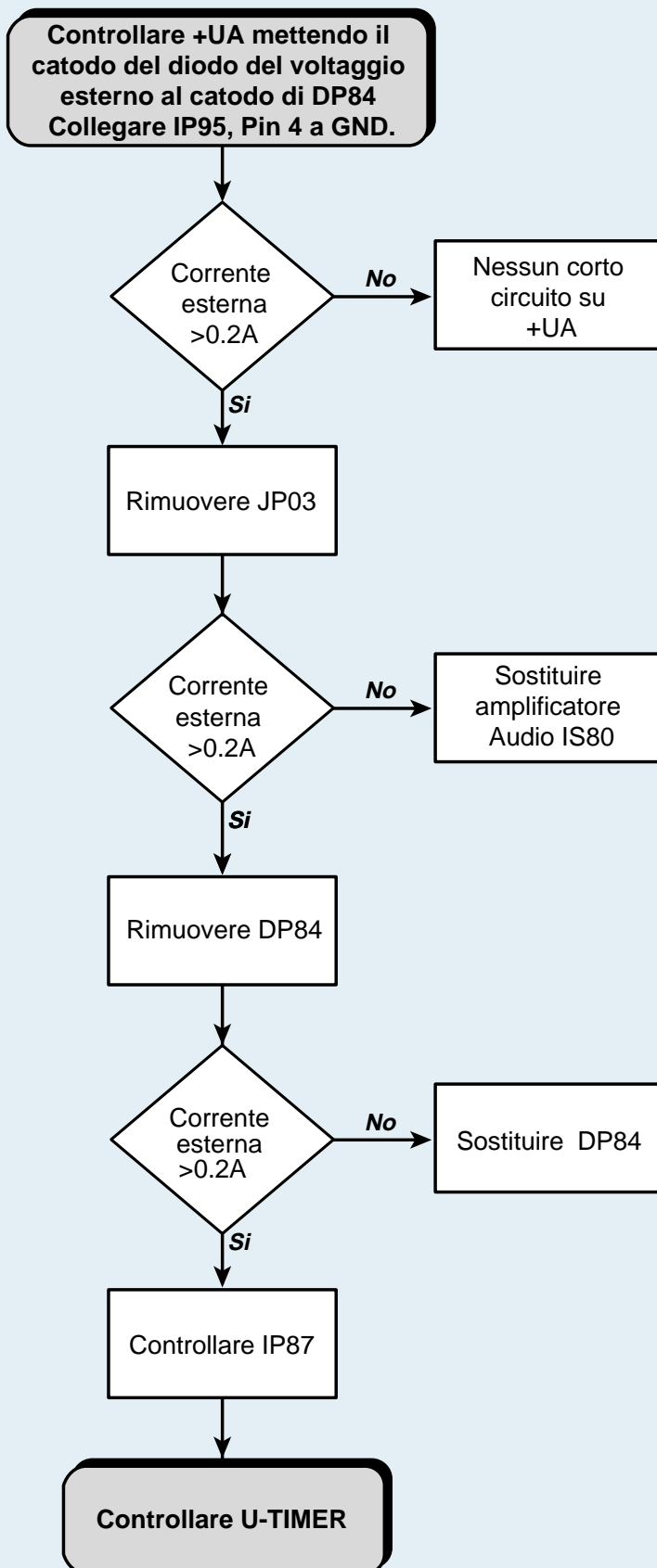
Generalità:

Tutte le misure devono essere prese con un trasformatore principale di separazione.

Informazione importante :

Se il circuito di sovraccarico era attivato, sostituite la resistenza fusibile nella posizione RB/LB06 sulla piastra CRT.

ALIMENTAZIONE – LATO SECONDARIO : +UA



Generalità:

Tutte le misure devono essere prese con un trasformatore principale di separazione.

Informazione importante :

Se il circuito di sovraccarico era attivato, sostituite la resistenza fusibile nella posizione RB/LB06 sulla piastra CRT.

VOLTAJES DC SECUNDARIOS

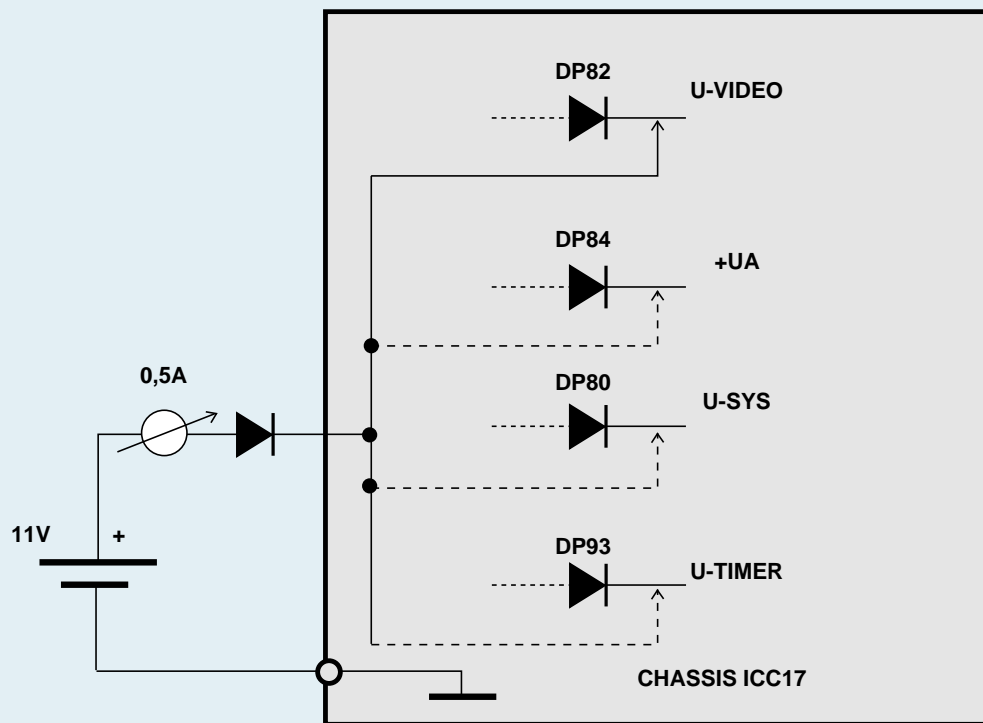
Todas las mediciones en este capítulo deberán hacerse SIN tensión de sector.

Test circuito:

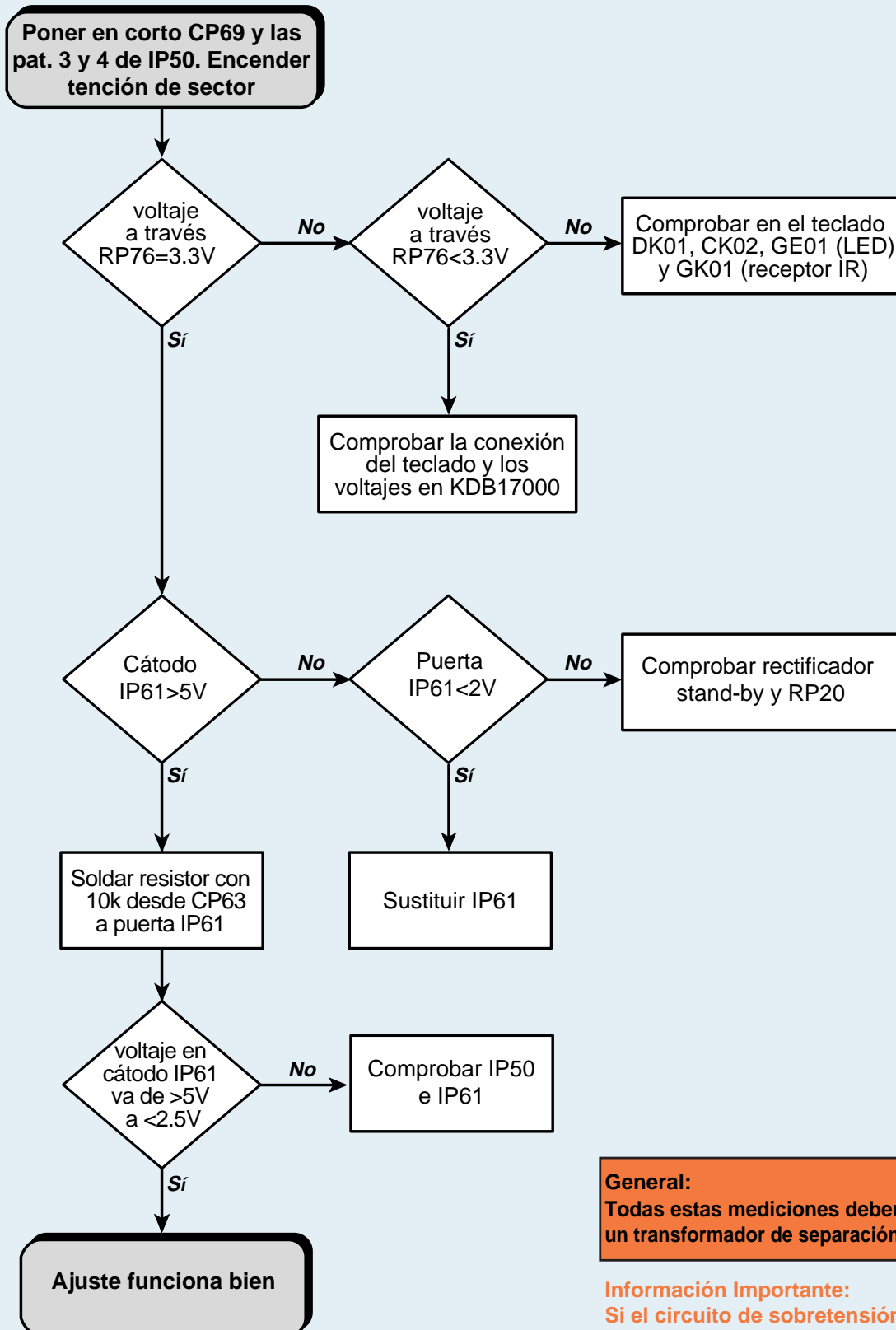
El voltaje externo es una alimentación DC externa con un voltaje ajustado de 11V y una limitación de corriente de 0.5A. El polo de la alimentación del voltaje externo debe estar directamente conectado a toma de tierra secundaria del chasis.

El polo+ de la alimentación del voltaje externo alimenta la carga a través de un diodo.

El ánodo del diodo está conectado al polo+, el cátodo de este diodo está conectado a la carga en el chasis. La corriente debe ser medida.

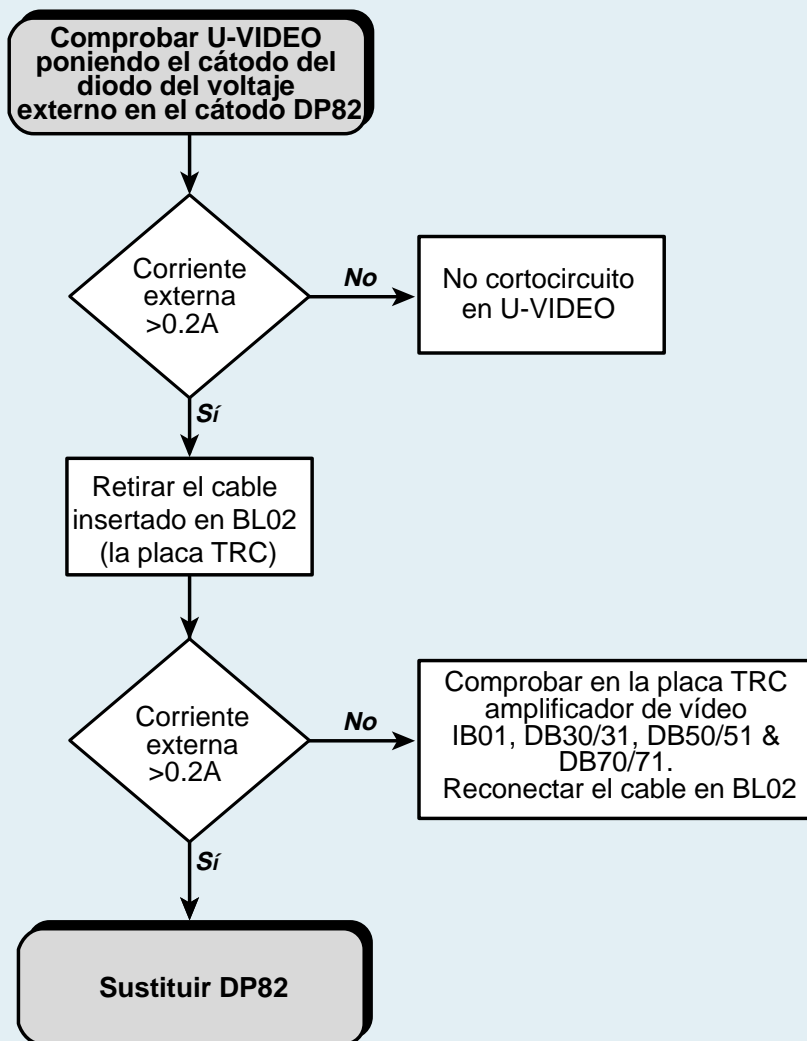


ALIMENTACION STAND BY – LADO SECUNDARIO



Después de acabar la comprobación, restituya cada modificación, p. ej. CP69, IP50, 10k

ALIMENTACION – LADO SECUNDARIO : U-VIDEO



Después de acabar la comprobación, restituya cada modificación, p. ej. BL02

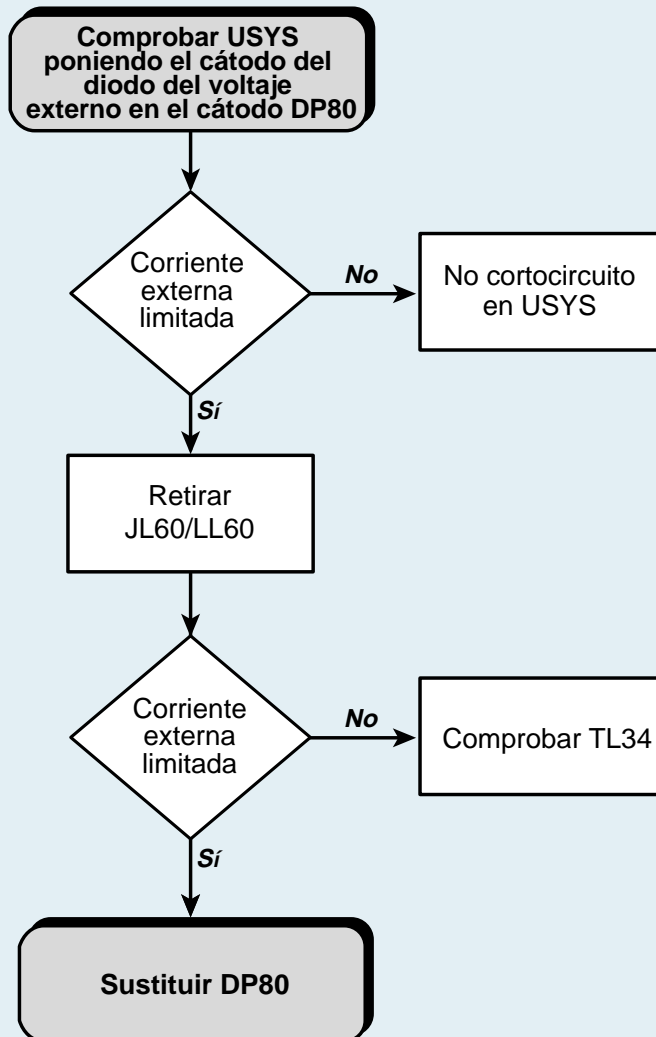
General:

Todas estas mediciones deben hacerse con un transformador de separación de alimentación.

Información Importante:

Si el circuito de sobretensión estaba activado, hay que cambiar el fusible resistor en posición RB/LB06 en placa TRC.

ALIMENTACION – LADO SECUNDARIO : U-SYS



Después de acabar la comprobación, restituya cada modificación, p. ej. JL60/LL60

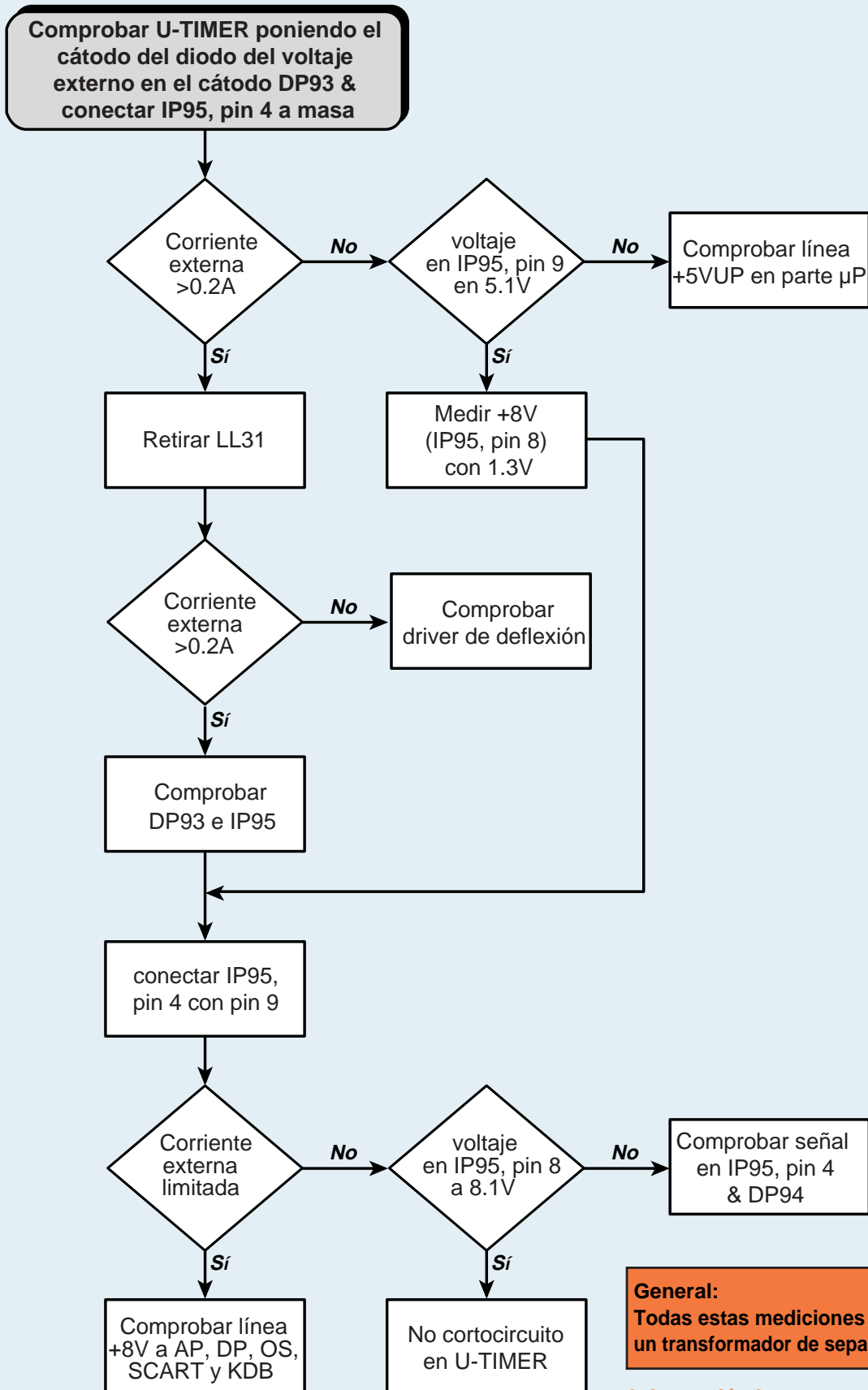
General:

Todas estas mediciones deben hacerse con un transformador de separación de alimentación.

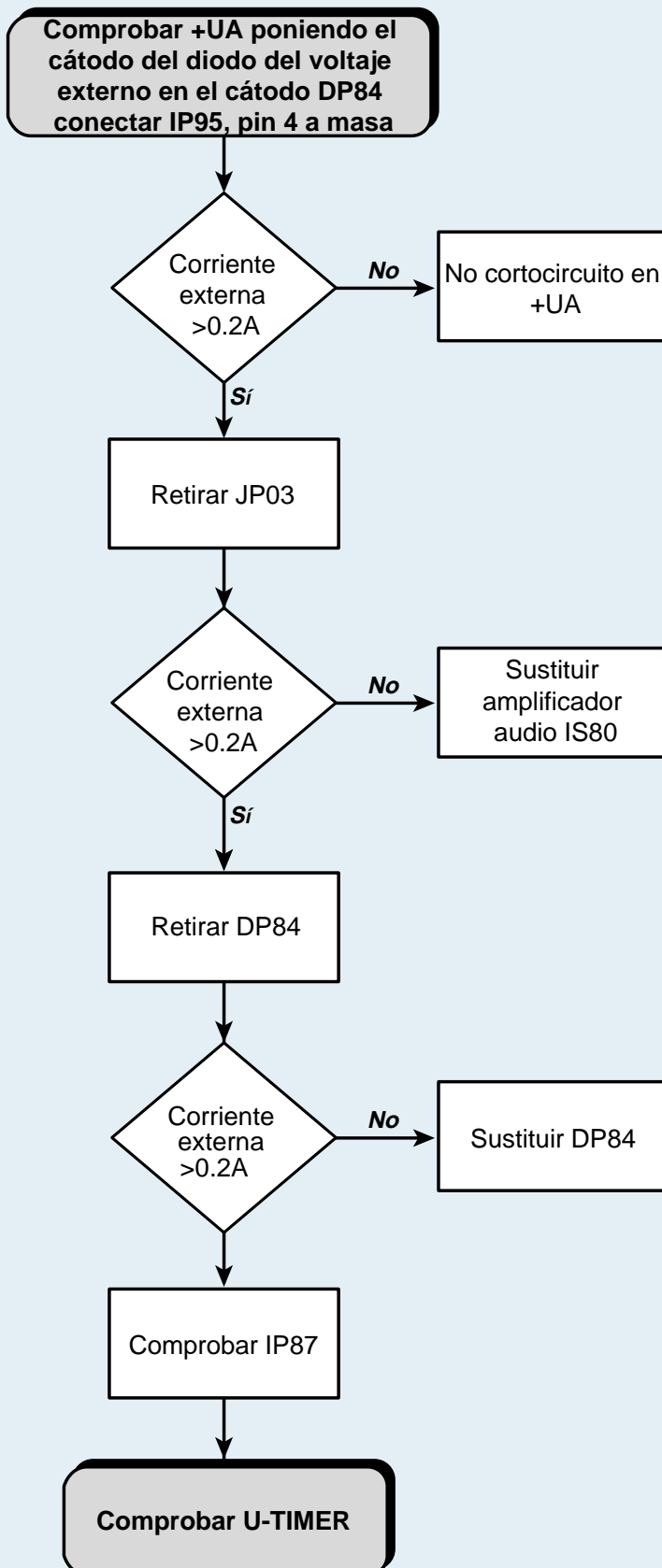
Información Importante:

Si el circuito de sobretensión estaba activado, hay que cambiar el fusible resistor en posición RB/LB06 en la placa TRC.

ALIMENTACION – LADO SECUNDARIO : U-TIMER



ALIMENTACION – LADO SECUNDARIO : +UA



General:

Todas estas mediciones deben hacerse con un transformador de separación de alimentación.

Información Importante:

Si el circuito de sobretensión estaba activado, hay que cambiar el fusible resistor en posición RB/LB06 en la placa TRC.

GENERAL INFORMATION

METHODOLOGY

1 - ON POWER-UP :

- Observe the behaviour of the two-coloured LED: note the various stages and compare them to the normal cycle.

By doing this, the time at which the problem arose and the part of the circuit which needs to be investigated can be identified.

2 -TROUBLE SHOOTING PROCEDURE: LED BEHAVIOUR

In certain cases the LED will flash when transmitting a message:

LED flashing : message being transmitted.

Count the flashes : code is two bursts separated by a pause of 0.7 s and repeated several times.

See the error code table.



**LIST OF LED MESSAGE
ERROR CODES**

This data is more precise than colour changes but still incomplete, since various causes may generate the same code.

3 - FAULT FINDING :

Carryout of stages 1 and 2: an oscilloscope test may clarify the code transmitted in stage two.

a - The television set operates fully or partially

- Use LED message observation fault finding methods 1 and 2. See also the faults listed relating to fault finding by symptom.

b - The television goes into permanent or cyclical security mode

- Observe LED's behaviour (flashing red, stable orange followed by flashing, etc.).
Select the relevant box in the column (LED behaviour fault finding).

INFORMATIONS GENERALES

METHODOLOGIE

1 - AU DEMARRAGE :

- Observer le comportement de la LED bicolore ; noter les différentes étapes et les comparer au cycle normal.
- Ceci permet d'identifier le moment où le problème apparaît et vers quelle partie du châssis s'orienter.

2 - DEMARCHE DE DEPANNAGE : COMPORTEMENT DE LA LED

Dans certains cas le voyant clignote en émettant un message :

Clignotement de la LED : Emission d'un message.

- Compter les clignotements : codés sur deux salves séparées par un temps d'arrêt de 0.7s et répétées plusieurs fois.

Se reporter au tableau de code erreur .



**LISTE DES CODES PANNES
MESSAGES LED**

Ces informations sont plus précises que les changements de couleur mais pas complètes car plusieurs causes différentes peuvent générer le même code.

3 - RECHERCHE DE LA PANNE :

- Exploitation des étapes 1 et 2 : une recherche par oscilloscope s'effectue selon deux voies distinctes .

a - Le châssis se met en fonctionnement complet ou partiel :

- Utiliser les démarches 1 et 2 de recherche par observation du message émis par la LED.
- Voir également les pannes concernées dans la recherche par symptômes.

b - Le châssis se met en sécurité permanente ou cyclique :

- Observer le comportement de la LED (rouge clignotant , orange stable suivi d'un clignotement ...)
- Sélectionner le cas correspondant dans cette rubrique (recherche par «comportement de la LED»).

ALLGEMEINE INFORMATIONEN

VORGEHENSWEISE

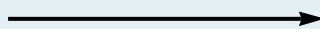
1 - BEIM EINSCHALTEN

Beobachten Sie das Verhalten der 2-farbigen LED: Merken Sie sich das Einschaltverhalten und vergleichen es mit den normalen Zyklen.
Hierdurch kann die Zeit bis der Fehlerzeitpunkt und die zu überprüfende Stufe festgestellt werden.

2 - TROUBLE SHOOTING ABLAUF: LED-VERHALTEN

In bestimmten Fällen leuchtet die LED zum Übertragen einer Fehlerinformation auf:
LED Aufleuchten: Übertragung der Fehlerinformation
Zählen der Fehlerinformation: Kodiert in zwei Impulsbündeln, unterbrochen durch 0,7 s Pause.
Dieses wiederholt sich mehrere Male.

Sehen Sie in der Fehlercodetabelle



Liste der LED Informationen
Fehler-Codes

Diese Informationen sind genauer als Farbänderungen aber unvollständig, da verschiedene Ursachen denselben Code verursachen.

3 - FEHLERSUCHE

Funktionen der Stufen 1 und 2: Messungen mit dem Oszilloskop sind für die beiden separaten Vorgänge durchzuführen.

a - Das Gerät arbeitet ganz oder teilweise:

- Benutzen Sie die LED Informationen der Fehlersuchmethode 1 und 2.
Schauen Sie ebenfalls bei Fehlersuche nach Symptomen nach.

b - Das Fernsehgerät schaltet permanent oder periodisch ab:

- Beobachten Sie das LED-Verhalten (rotes Aufleuchten, konstantes orange gefolgt von Aufleuchten, usw.)
Wählen Sie das zutreffende Kästchen in der Spalte: Fehlersuche durch LED-Verhalten.

INFORMAZIONI GENERALI

METODOLOGIA

1 - DURANTE L'ACCENSIONE :

- Osservare il comportamento del LED bicolore; verificare le diverse fasi e confrontarle con il ciclo normale.

Ciò consente di identificare il momento in cui il problema si verifica e di quale parte del telaio occuparsi.

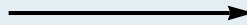
2 - RICERCA E CORREZIONE DEI GUASTI : COMPORTAMENTO DEL LED

In alcuni casi la spia luminosa lampeggia visualizzando un messaggio :

Lampeggiamento del LED: visualizzazione di un messaggio.

- Contare i lampeggiamenti: codificati su due serie separate da un tempo di arresto di 0,7 sec. e ripetuti più volte.

Riferirsi alla tabella dei codici d'errore.



**ELENCO DEI CODICI DI GUASTO
MESSAGGI LED**

Queste informazioni sono più precise dei cambiamenti di colore ma non sono complete, poiché più cause diverse possono generare il medesimo codice.

3 - RICERCA DEI GUASTI :

Sfruttando le fasi 1 e 2; la ricerca mediante l'oscilloscopio viene eseguita in due modi distinti.

a - Il telaio funziona completamente o parzialmente :

- Utilizzare la sequenza 1 e 2 di ricerca osservando i messaggi visualizzati dal LED.

Vedere anche i guasti relativi nella ricerca per sintomi.

b - Il telaio entra in sicurezza permanente o ciclica :

- Osservare il comportamento del LED (rosso lampeggiante, arancione stabile seguito da un lampeggiamento...). Selezionare il caso corrispondente in questa tabella (ricerca per "comportamento del LED")

INFORMACIÓN GENERAL

PROCEDIMIENTO

1 - AL ENCENDERLO

- Observar el funcionamiento del LED: distinga las etapas y compárelas con el ciclo normal. Este procedimiento le permite identificar la etapa en la que surge el problema y la parte del chasis donde resolverlo.

2 -RESOLUCIÓN DE PROBLEMAS : FUNCIONAMIENTO DEL LED

En algunas ocasiones, el LED parpadea al emitir un mensaje :

LED parpadea: emisión del mensaje.

Cuenta de los parpadeos: codificado en dos intervalos separados por una pausa de 0.7 seg. y repetidos varias veces.

Consulte la tabla de códigos de error



LISTA DE LOS CÓDIGOS DE ERROR DEL LED

Estos datos son más precisos que los de color aunque incompletos, dado que varias causas distintas pueden crear el mismo código.

3 - LOCALIZACIÓN DE FALLOS :

Para las etapas 1 y 2: se realiza una localización por medio del osciloscopio de dos maneras distintas.

a - El televisor funciona completa o parcialmente

- Utilice los métodos 1 y 2 de localización por observación del mensaje emitido por el LED. Vea también otros fallos relacionadas al hacer la localización por síntomas.

b - El televisor pasa al modo de seguridad permanente o cíclico

- Observe el funcionamiento del LED (rojo parpadeante, naranja fijo seguido de un parpadeo, etc.). Seleccione el defecto dependiente del código de error observado (localización por funcionamiento del LED).

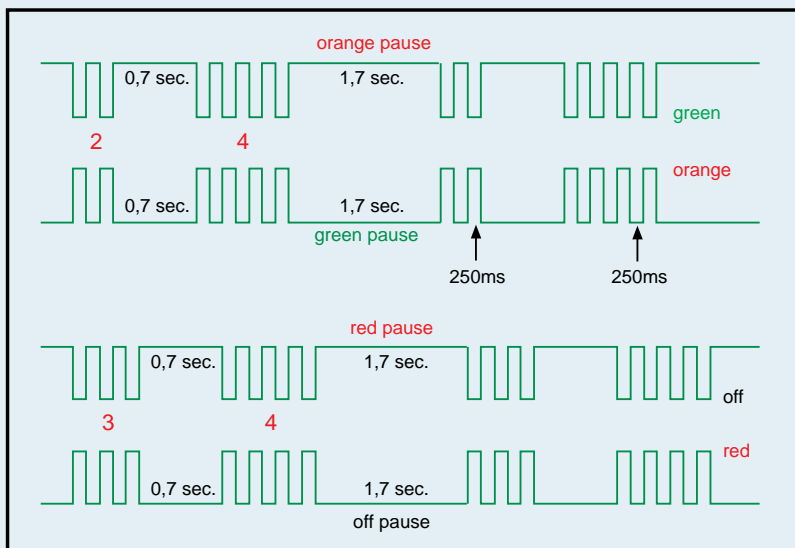
GENERAL INFORMATION - LED BEHAVIOUR

LED FLASHES

Message transmission.

The Error codes are signalled by the TV's red LED.

Count the number of flashes : error code is two burst separated by a pause of 0.7sec. and repeated four times..
There is 1.7 sec. between each codes sequence .



currently all known ICC17 TV sets are fitted with a Bicoloured LED, the red part is the Standby LED whilst, the green part is directly connected to the switched +8V supply. Therefore, the colour of the LED will depend upon the state of this voltage, the chart below gives the corresponding LED-colours:

	LED-port	
switched +8V	off	on
on	green	orange
off	off	red

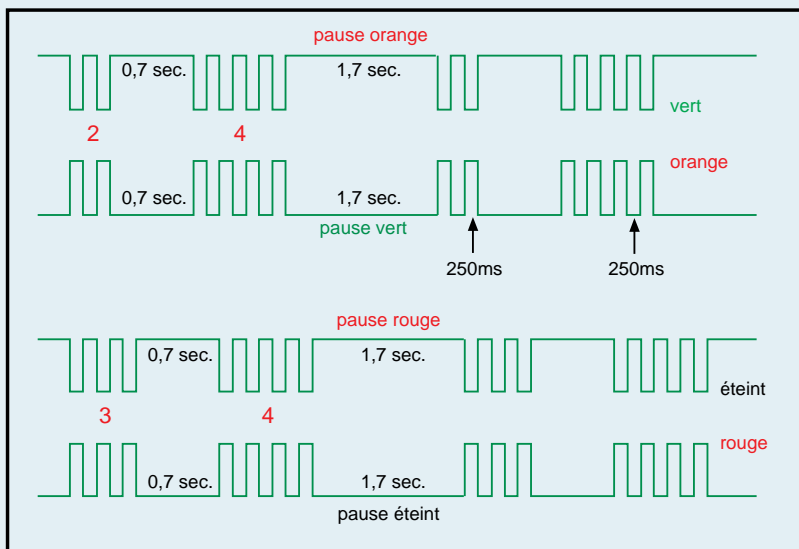
CODES	DEFAULTS
14	IC TDA8855H DOES NOT ANSWER
15	AUDIO PROCESSOR NO LONGER RESPONDING.
21	SDA LINE BEING HELD LOW
23	CLOCK JAMMED AT LOW LEVEL, SCL LINE JAMMED AT LOW LEVEL.
25	SWITCHED 5V NOT AVAILABLE
26	TUBE DOES NOT GET WARM IN TIME
27	THE DETECTION SYSTEM HAS DETECTED PROTECTION ON MORE THAN THREE OCCASIONS (DOES THIS MEAN THAT A PROBLEM HAS BEEN DETECTED ON THE BREATHING LINE?).
28	SCANNING PROBLEM AFTER 2 S, THE PROGRAM TRIES TO PERFORM A START.
34	THE NVM CHIP DOES NOT ANSWER
36	WRONG NVRAM ADDRESS PASSED TO THE BUS-HANDLER
37	UNEXPECTED LEVEL ON NMI (INTERRUPT) LINE FOUND (POSSIBLE CAUSE : TUBE FLASHOVER)
41	BUS (DATA LINE) NOT RECOVERABLE

COMPORTEMENT DE LA LED - CODES PANNES

CLIGNOTEMENT DE LA LED

Emission d'un message.
Codes pannes visualisés par l'intermédiaire de la LED rouge.

Ces codes sont composés de deux chiffres, séparés d'une pause de 0.7 seconde.
Ils sont répétés 4 fois. Un temps de 1,7 s sépare deux codes pannes.



Dans les chassis CONNUS ICC17, une diode LED bicolore est insérée.
La partie rouge de celle-ci est la LED standby tandis que la partie verte est directement connectée au +8V commuté. La couleur de cette dernière est représenté dans le tableau ci-dessous selon les valeurs ON et OFF du +8V

	LED-port	
switched +8V	off	on
on	green	orange
off	off	red

CODES	DEFAUTS
14	TDA8855H NE REPOND PLUS
15	PROCESSEUR AUDIO NE REPOND PLUS
21	LIGNE SDA AU NIVEAU BAS
23	CLOCK AU NIVEAU BAS, LIGNE SCL AU NIVEAU BAS
25	5V COMMUTE N'EST PAS DISPONIBLE
26	LE TUBE NE CHAUFFE PAS À TEMPTS
27	MODULE AUDIO NON DETECTE
28	PROBLEME DE BALAYAGE A MOIN DE 2S LE PROGRAMME ESSAYE DE FAIRE UN DEMARRAGE
34	PROBLEME NVM, MEMOIRE NE REPOND PLUS
36	ADRESSE NVM NON TROUVEE
37	PROBLEME DETECTE SUR LA LINE "INT" PENDANT LE DEMARRAGE OU LE FONCTIONNEMENT DU TV"ARKING"
41	I2C BUS DATA RESTE BLOQUE

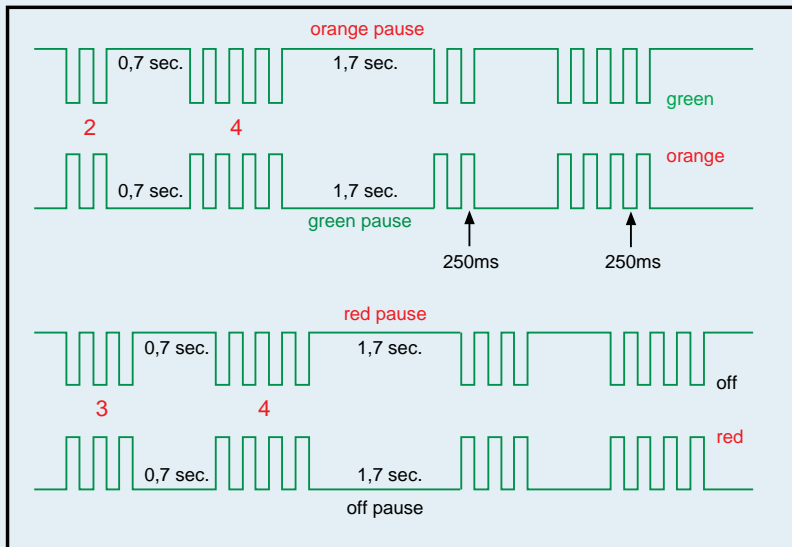
ALLGEMEINE INFORMATIONEN - LED VERHALTEN

LED BLINKZEICHEN

Übermittlung von Informationen

Die Fehler-Codes werden von der roten LED angezeigt.

Zählen Sie die Leuchtimpulse: Sie werden in zwei Blinkfolgen, abgetrennt durch eine Pause von 0,7 sek., Sie werden fünf Mal wiederholt. Zwischen jeweils zwei Codes ist eine Pause von 1,7 sek.



Im CONNUS ICC17 Rahmen ist eine Zwei-Farben-LED eingebaut: Die rote Anzeige ist im Stand-By aktiviert, die grüne Anzeige bedeutet, daß die 8V- Stromversorgung eingeschaltet ist. Die Farbe der grünen LED ist in der Tabelle unten entsprechend der Ein- und Ausschaltwerte der 8V Stromversorgung aufgeführt.

	LED-port	
switched +8V	off	on
on	green	orange
off	off	red

CODES	FEHLER
14	IC TDA8855H ANTWORTET NICHT
15	AUDIOPROZESSOR SPRICHT NICHT MEHR AN
21	BUS DATA LINE IST AUF LOW
23	DER CLOCK-IMPULS HÄNGT AM L-PEGEL FEST, SCL-LINE HÄNGT AM UNTEREN PEGEL FEST
25	GESCHALTETE 5V NICHT VORHANDEN
26	RÖHRE WIRD NICHT RECHTZEITIG WARM
27	DAS SCHUTZSCHALTUNGSSYSTEM HAT MEHR ALS DREI STÖRFÄLLE ENTDECKT. (KÖNNTE ES SEIN, DAß ES EIN PROBLEM IN DER BREATHING-VERBINDUNG GIBT?)
28	ABTASTPROBLEM NACH 2 SEK. DAS PROGRAMM VERSUCHT EINEN NEUSTART.
34	NVM CHIP ANTWORTET NICHT
36	DIE ADRESSE DES NVM WURDE NICHT GEFUNDEN.
37	UNERWARTETER ZUSTAND AN NMI (INTERRUPT) LINE GEFUNDEN. (MÖGLICHE URSACHE = RÖHREN-ÜBERSCHLAG")
41	BUS (DATA LINE) NICHT MÖGLICH ZU REAKTIVIEREN

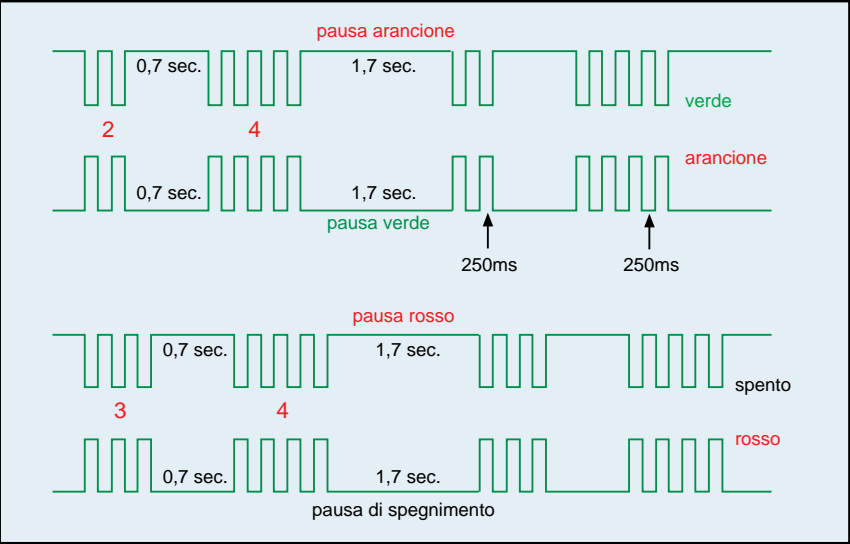
INFORMAZIONI GENERALI - COMPORTAMENTO DEL LED

LAMPEGGI LED : Trasmissione messaggi.

I codici errore vengono indicati dal diodo LED rosso del TV.

Contare i lampeggi: codificati in due gruppi di impulsi separati da una pausa di 0,7 secondi, sono ripetuti 4 volte.

I due pacchetti di impulsi sono distanziati di 1,7 secondi.



Nel telaio CONNUS ICC17, un diodo LED bicolore è inserito. La parte rossa del diodo è il LED atteso invece la parte verde è direttamente collegata al +8V commutato. Il colore di quest'ultima è rappresentato nella tavola qui sotto secondo i valori ON e OFF di +8V

	LED-port	
switched +8V	off	on
on	green	orange
off	off	red

CODICE	PROBLEMA
14	TDA8855H NON RISPONDE
15	PROCESSORE AUDIO NON RISPONDE PIÛ.
21	LINEA SDA FORZATA BASSA
23	CLOCK BLOCCATO AL LIVELLO BASSO, LINEA TERRA BLOCCATA AL LIVELLO BASSO
25	LA TENSIONE 5V COMMUTATI NON DISPONIBILE
26	IL TUBO NON RAGGIUNGE LA CORRETTA TEMPERATURA NEL TEMPO STABILITO.
27	PIÛ DI 3 VOLTE LA RILEVAZIONE HA SCOPERTO UNA IPROTEZIONE! (CIO» C'» UN PROBLEMA SCOPERTO SULLA LINEA IBREATING?).
28	PROBLEMA DI SCANSIONE DOPO 2S, IL PROGRAMMA PROVA A FARE UN AVVIO.
34	IL CHIP NVM NON RISPONDE
36	INDIRIZZO NVM NON TROVATO.
37	LIVELLO IMPREVISTO SULLA LINEA NMI
41	BUS I2C (LINEA DATI) NON RIPRISTINABILE

FUNCIONAMIENTO DEL LED - CÓDIGOS DE AVERÍAS

PARPADEO DEL LED

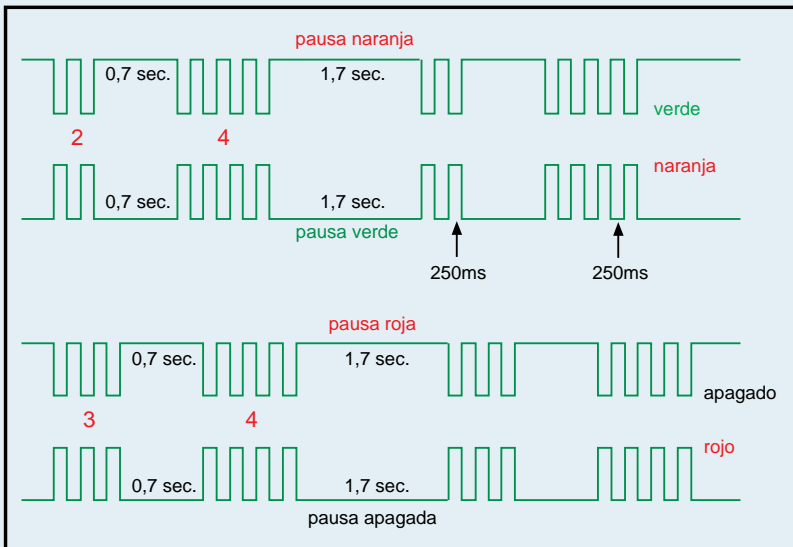
Emisión de un mensaje.

Códigos averías visualizados por el LED roja.

Contar los parpadeos, clasificados en dos intervalos separados por un tiempo de parada de 0,7 seg.

Se repiten 4 veces.

Un tiempo de 1.7s separa dos códigos averías.



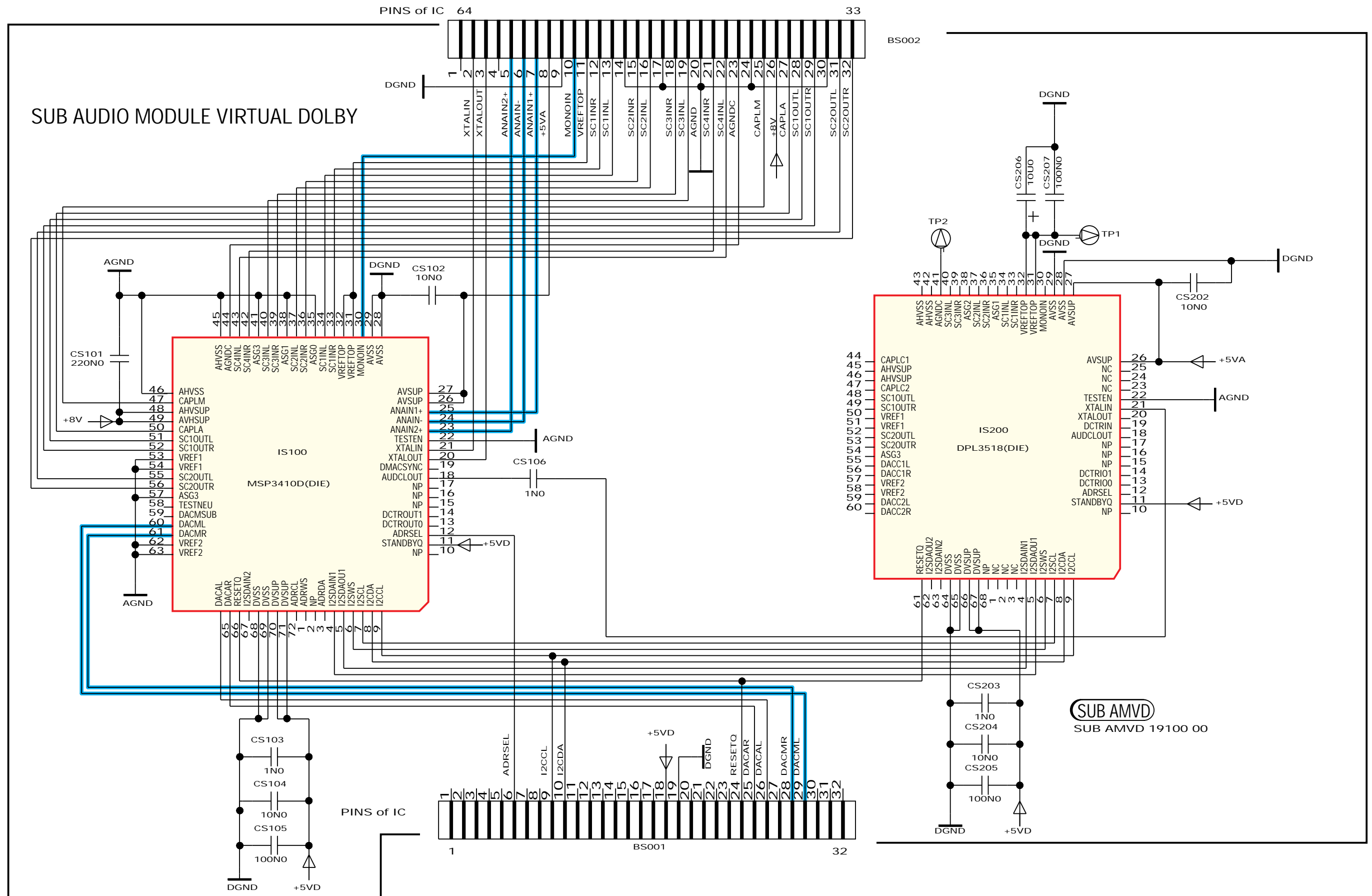
En los chasis ICC17, está insertado un diodo LED bicolor.

La parte roja es el LED standby mientras que la parte verde está directamente conectada con el +8V conmutado. El color de esta última está representado en el cuadro indicado a continuación según los valores ON y OFF del +8V

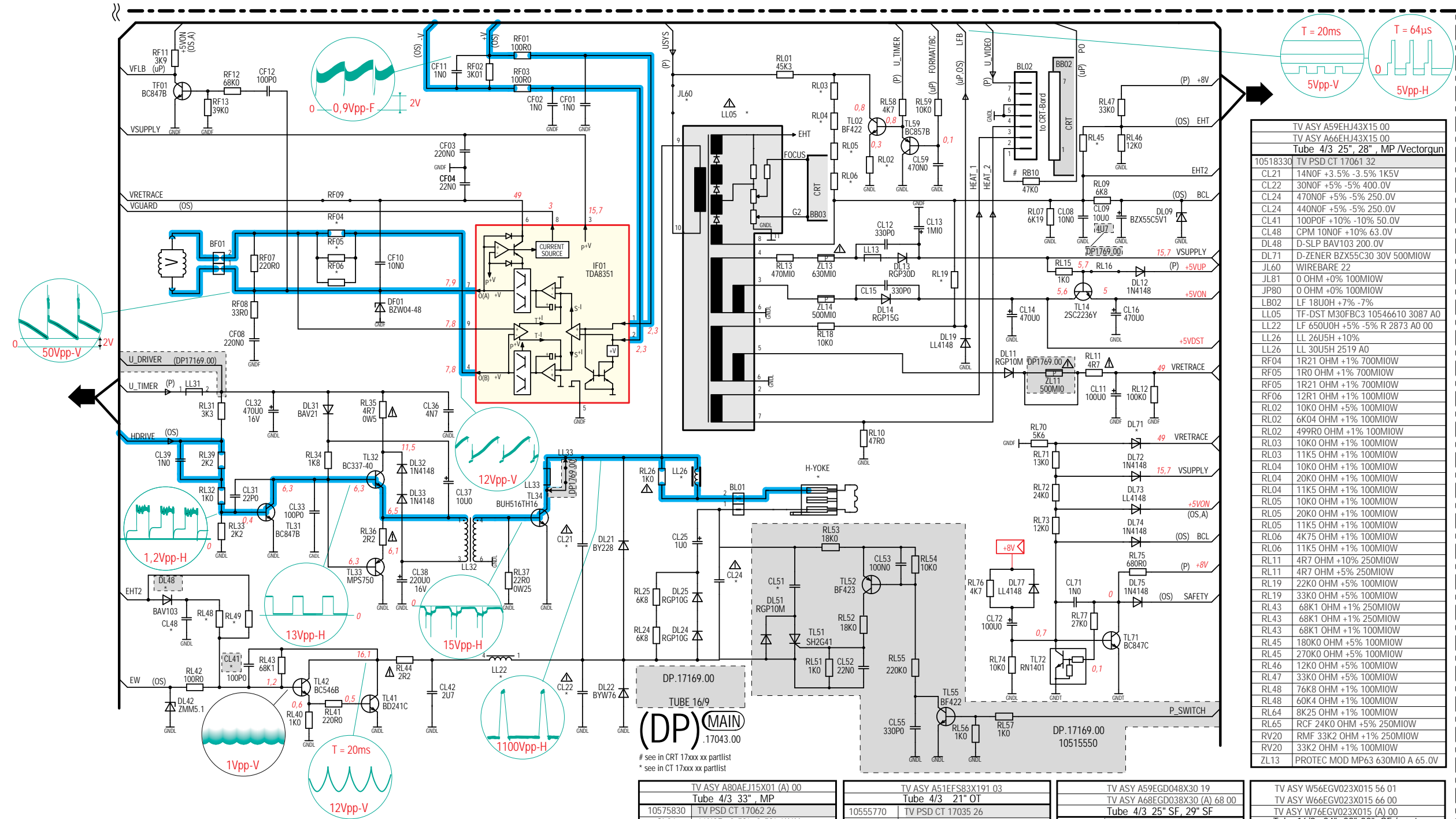
	LED-port	
switched +8V	off	on
on	green	orange
off	off	red

CÓDIGOS	DEFECTOS
14	CIR. INTEGRADO DE VIDEO TDA8855H NO RESPONDE
15	EL PROCESADOR AUDIO NO RESPONDE.
21	DATA DEL BUS I2C PERMANECE EN BAJO
23	CLOCK BLOQUEADO EN NIVEL BAJO, LÍNEA SCL BLOQUEADA EN NIVEL BAJO
25	NO SE DISPONE DE LOS "5v CONMUTADOS"
26	EL TUBO TARDA EN CALENTARSE
27	LA PROTECCIÓN DE LA DEFLEXIÓN ACTÚA MAS DE 3 VECES (EL PROBLEMA SE DETECTA EN LA LÍNEA DE "BREATHING")
28	PROBLEMA DE BARRIDO. DESPUÉS DE 2s, INTENTA ARRANCAR DE NUEVO
34	LA MEMORIA NO VOLÁTIL X24C32 NO RESPONDE
36	DIRECCIÓN NVM NO LOCALIZADA.
37	PROBLEMA DETECTADO EN LA LÍNEA "Interrupt" DURANTE EL ARRANQUE O EL FUNCIONAMIENTO DEL TV. POSIBILIDAD DE CHISPAZOS EN MUY ALTA?
41	DATA DEL BUS I2C PERMANECE BLOQUEADO

SUB AUDIO SIGNAL MODULE - SUB MODULE AUDIO - AUDIO SIGNAL SUBMODUL - SUB MODULO AUDIO



SCANNING - BALAYAGE - ABLENKUNG - BARRIDO - SCANSIONE



⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be guaranteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraine la non-conformité de l'appareil.
Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) durch nicht normgerechte Teile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione degli elementi di sicurezza (contrassegnati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformità dell'apparecchio.
In tal caso é "esclusa la responsabilità" del costruttore.

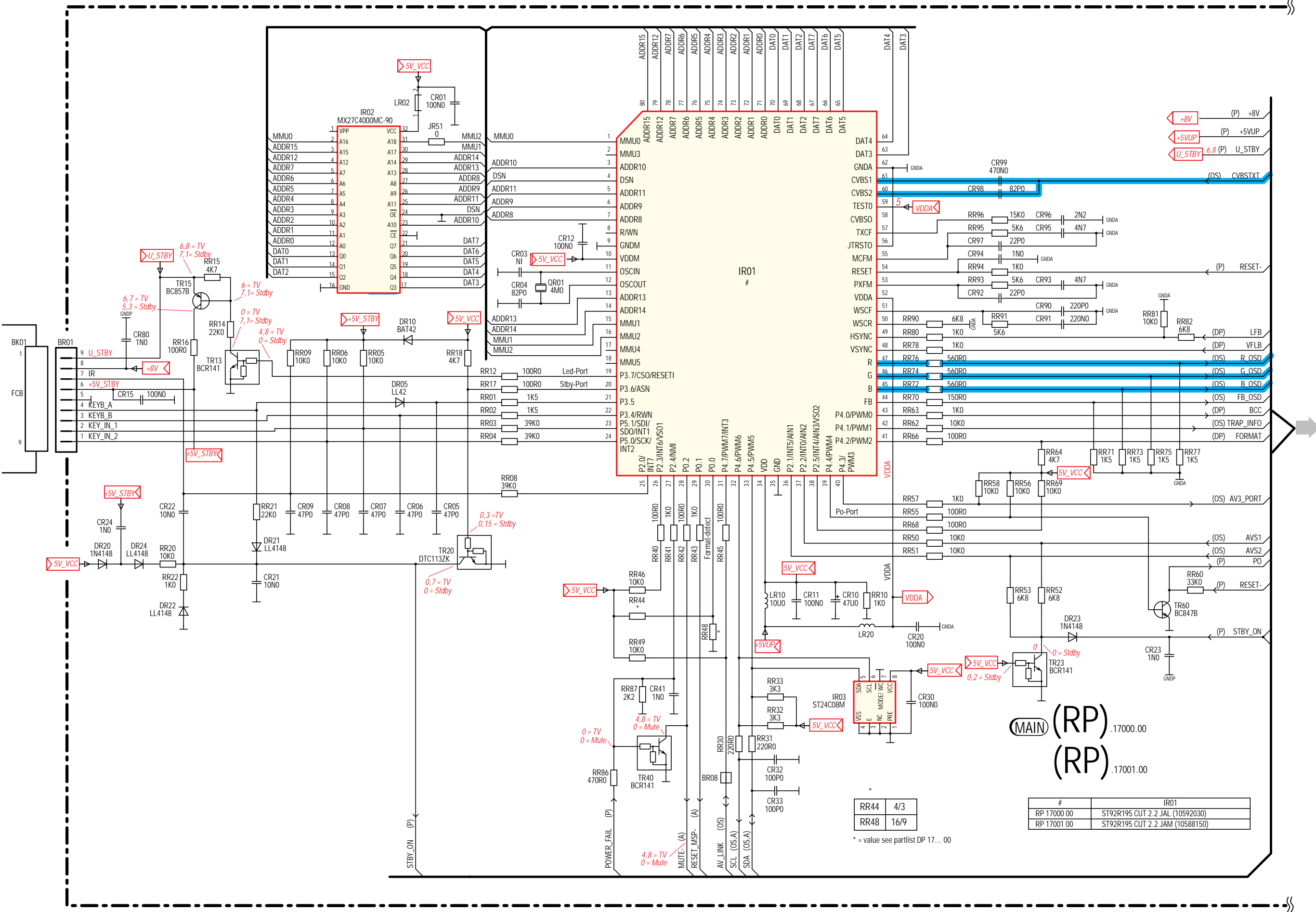
La substitución de elementos de seguridad (marcados con el símbolo ⚠) por componentes no homologados segun la norma CEI 65, provoca la no conformidad del aparato.
En ese caso, el fabricante cesa de ser responsable.

TV ASY A80AEJ15X01 (A) 00	TV ASY A51EFS83X191 03
Tube 4/3 33", MP	Tube 4/3 21" OT
10575830	TV PSD CT 17035 26
CL21	16N2F +3.5% -3.5% 1K6V
CL22	30N0F +5% -5% 400.0V
CL24	560N0F +5% -5% 250.0V
CL41	100P0F +10% -10% 50.0V
CL48	10N0F +10% 63.0V
DL48	D-SLP BAV103 200.0V
DL71	D-ZENER BZX55C24 24V 500MIOW
JL60	WIREBARE 22
JL80	0 OHM +0% 100MIOW
LB02	LF 18U0H +7% -7%
LL05	TF-DST M30FBC3 10555640 3087 A0
LL22	LF 650U0H +5% -5% R 2873 A0 00
LL26	LL 85U0H 2519 A0
RF05	1R5 OHM +1% 700MIOW
RF06	10R0 OHM +1% 100MIOW
RL02	6K04 OHM +1% 100MIOW
RL03	10K0 OHM +1% 100MIOW
RL04	10K0 OHM +1% 100MIOW
RL05	10K0 OHM +1% 100MIOW
RL06	3K32 OHM +1% 100MIOW
RL45	110K0 OHM +5% 100MIOW
RL49	60K4 OHM +1% 100MIOW
RV20	4K7 OHM +5% 250MIOW
RV20	23K7 OHM +1% 250MIOW

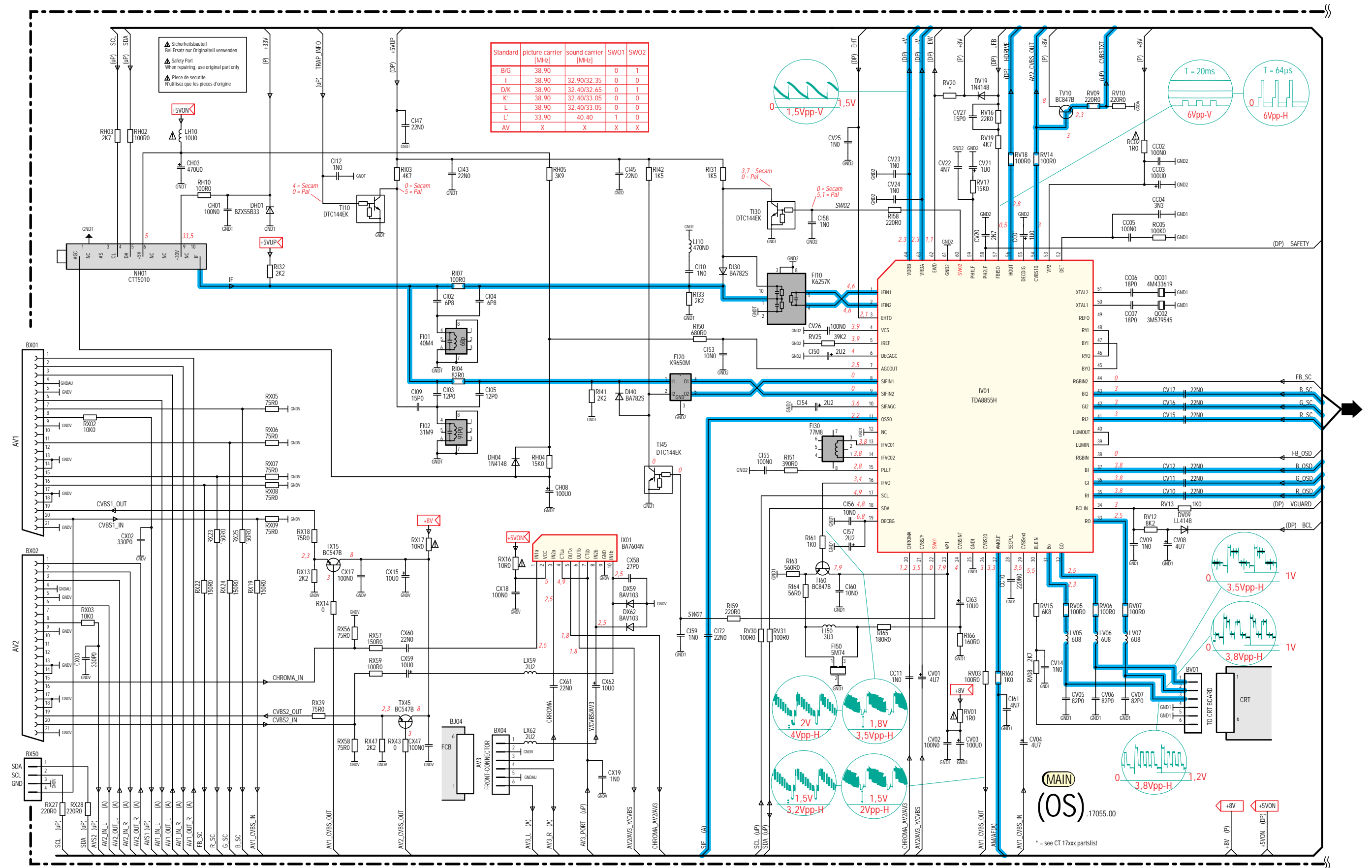
TV ASY A59EGD048X30 19	TV ASY A68EGD038X30 (A) 68 00
Tube 4/3 25" SF, 29" SF	Tube 4/3 25" SF, 29" SF
10515520	TV PSD CT 17071 26
CL21	16N2F +3.5% -3.5% 1K6V
CL22	30N0F +5% -5% 400.0V
CL24	510N0F +5% -5% 250.0V
CL41	100P0F +10% -10% 50.0V
CL48	10N0F +10% 63.0V
DL48	D-SLP BAV103 200.0V
DL71	D-ZENER BZX55C30 30V 500MIOW
JL60	WIREBARE 22
JL80	0 OHM +0% 100MIOW
LB02	LF 32U0H +4% -4%
LL22	LF 650U0H +5% -5%
LL26	LL 26U5H +10%
RF05	RMF 1R0 OHM +1% 700MIOW
RL02	6K8 OHM +5% 100MIOW
RL03	4K75 OHM +1% 100MIOW
RL04	4K75 OHM +1% 100MIOW
RL05	4K75 OHM +1% 100MIOW
RL06	4K75 OHM +1% 100MIOW
RL19	15K0 OHM +5% 100MIOW
RL45	180K0 OHM +5% 100MIOW
RL48	100K0 OHM +5% 100MIOW
RL49	300K0 OHM +5% 100MIOW
RV20	4K7 OHM +5% 250MIOW
RV20	33K2 OHM +1% 250MIOW

TV ASY W56EGV023X015 56 01	TV ASY W66EGV023X015 66 00
Tube 16/9 24", 28", 32", SF / vectorgun	Tube 16/9 24", 28", 32", SF / vectorgun
10515530	TV PSD CT 17083 38
CL21	15N5F +3.5% -3.5% 1K6V
CL22	27N0F +5% -5% 400.0V
CL24	440N0F +5% -5% 250.0V
CL41	100P0F +10% -10% 50.0V
CL48	100N0F +10% 63.0V
CL51	290N0F +5% -5% 250.0V
DL48	D-SLP BAV103 200.0V
DL71	D-ZENER BZX55C24 24V 500MIOW
JL60	WIREBARE 22
JL82	0 OHM +0% 100MIOW
LB02	LF 32U0H +4% -4%
LL05	TF-DST TDS29 15314460 10
LL22	LF 650U0H +5% -5%
LL26	LL 30U5H 2519 A0
RF05	1R21 OHM +1% 700MIOW
RL02	4K99 OHM +1% 100MIOW
RL03	6K49 OHM +1% 100MIOW
RL04	6K49 OHM +1% 100MIOW
RL05	6K49 OHM +1% 100MIOW
RL06	2K37 OHM +1% 100MIOW
RL19	13K0 OHM +5% 100MIOW
RL45	390K0 OHM +5% 100MIOW
RL48	220K0 OHM +5% 100MIOW
RV20	180K0 OHM +5% 100MIOW
RV20	47K0 OHM +5% 250MIOW
RV20	100K0 OHM +1% 250MIOW

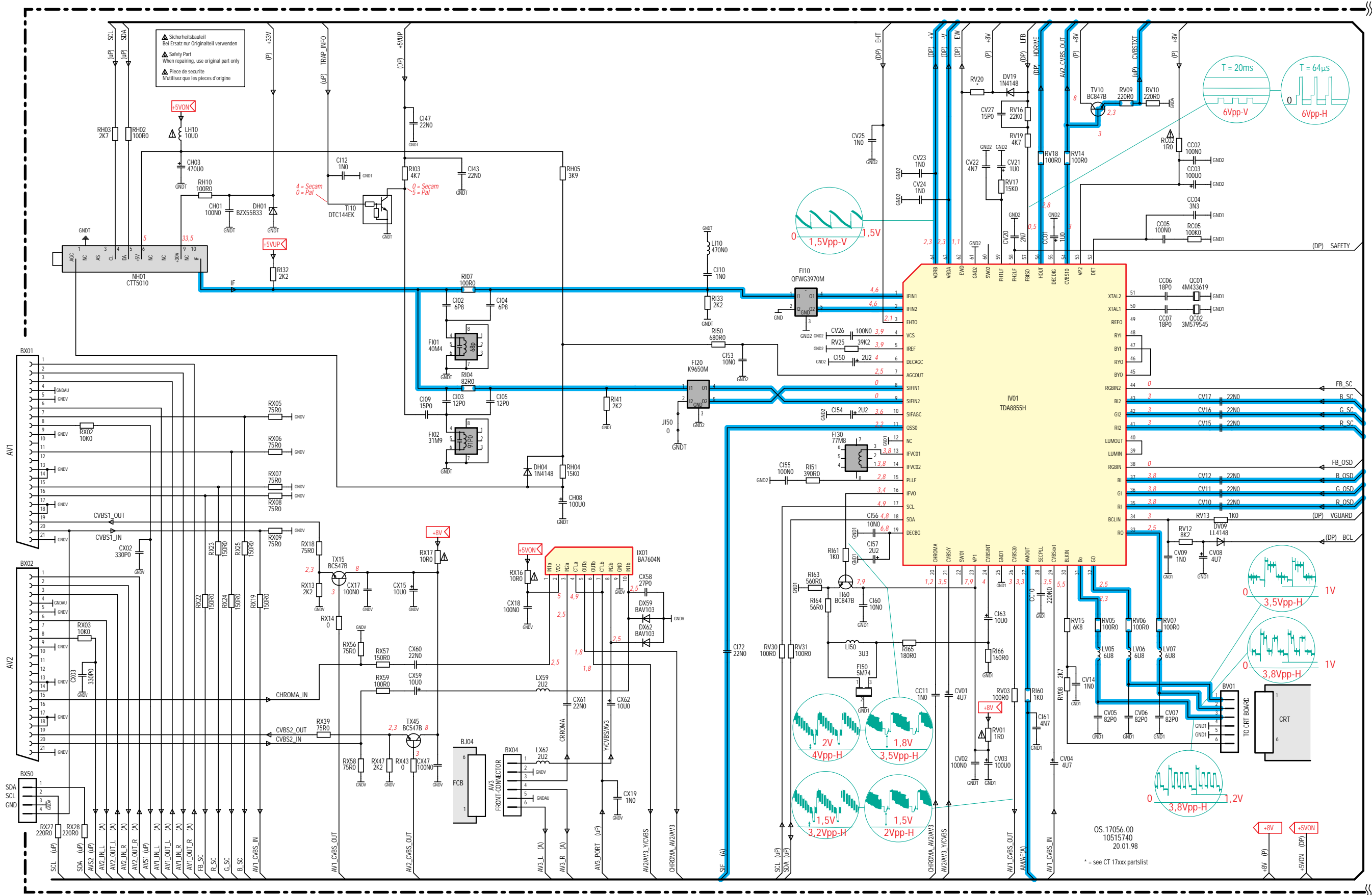
CONTROL MICROPROCESSOR - MICROPROCESSEUR DE COMMANDE - MIKROPROZESSOR - MICROPROCESSORE DEI COMANDI - MICROPROCESADOR DE LOS MANDOS



RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR / TRATAMENTO VIDEO



RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR/TRATAMENTO VIDEO



AV2_OUT_R (OS)
 AV2_OUT_L (OS)
 AV1_OUT_R (OS)
 AV1_OUT_L (OS)
 +8V (P)
 AV3_L (OS)
 AV3_R (OS)
 AV2_IN_L (OS)
 AV2_IN_R (OS)
 AV1_IN_L (OS)
 AV1_IN_R (OS)
 AM/AF (OS)
 SIF (OS)
 SCL (uP)
 SDA (uP)
 +5VON (DP)
 RESET_MSP- (uP)
 MUTE- (uP)
 +UA (P) 33
 -UA (P)

RS64 100K0
 RS65 100K0
 RS66 100K0
 RS67 100K0
 LS60 2U2
 LS61 2U2
 LS62 2U2
 LS63 2U2
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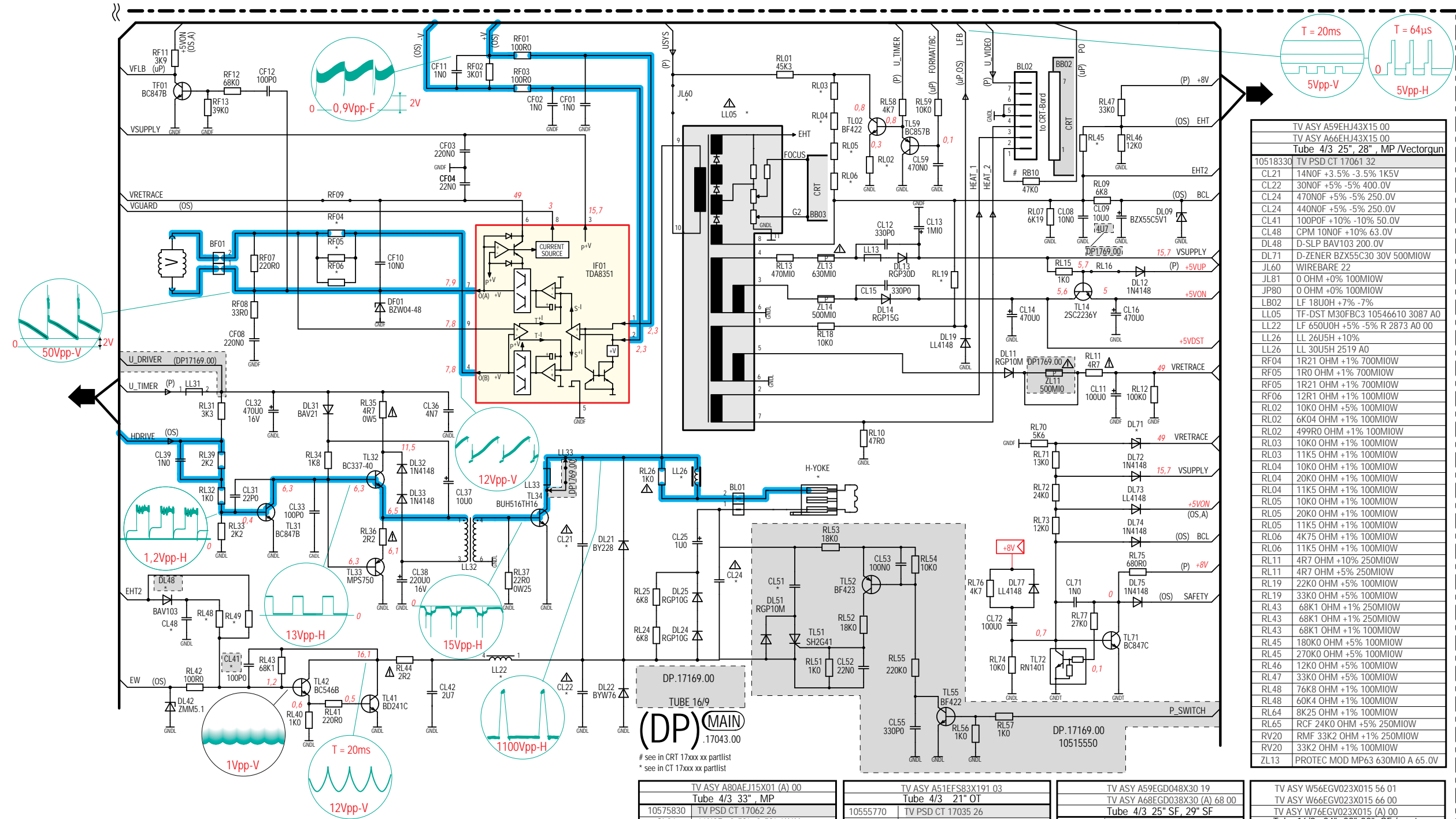
IS40 MSP3400C-PP-C6

MAIN (AP) 17002.00

Safety Information:

- ⚠ Sicherheitsbauteil
Bei Ersatz nur Originalteil verwenden
- ⚠ Safety Part
When repairing, use original part only
- ⚠ Piece de securite
N'utilisez que les pieces d'origine

SCANNING - BALAYAGE - ABLENKUNG - BARRIDO - SCANSIONE



⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be guaranteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraîne la non-conformité de l'appareil.
Dans ce cas, la responsabilité du fabricant n'est plus engagée.

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TV ASY A80AEJ15X01 (A) 00	TV ASY A51EFS83X191 03
Tube 4/3 33", MP	Tube 4/3 21" OT
10575830	TV PSD CT 17035 26
CL21	16N2F +3.5% -3.5% 1K6V
CL22	30N0F +5% -5% 400.0V
CL24	560N0F +5% -5% 250.0V
CL41	100P0F +10% -10% 50.0V
CL48	10N0F +10% 63.0V
DL48	D-SLP BAV103 200.0V
DL71	D-ZENER BZX55C24 24V 500MIOW
JL60	WIREBARE 22
JL80	0 OHM +0% 100MIOW
LB02	LF 18U0H +7% -7%
LL05	TF-DST M30FBC3 10555640 3087 A0
LL22	LF 650U0H +5% -5% R 2873 A0 00
LL26	LL 85U0H 2519 A0
RF05	1R5 OHM +1% 700MIOW
RF06	10R0 OHM +1% 100MIOW
RL02	6K04 OHM +1% 100MIOW
RL03	10K0 OHM +1% 100MIOW
RL04	10K0 OHM +1% 100MIOW
RL05	10K0 OHM +1% 100MIOW
RL06	3K32 OHM +1% 100MIOW
RL45	110K0 OHM +5% 100MIOW
RL49	60K4 OHM +1% 100MIOW
RV20	4K7 OHM +5% 250MIOW
RV20	23K7 OHM +1% 250MIOW

TV ASY A59EGD048X30 19	TV ASY A68EGD038X30 (A) 68 00
Tube 4/3 25" SF, 29" SF	Tube 4/3 25" SF, 29" SF
10515520	TV PSD CT 17071 26
CL21	16N2F +3.5% -3.5% 1K6V
CL22	30N0F +5% -5% 400.0V
CL24	510N0F +5% -5% 250.0V
CL41	100P0F +10% -10% 50.0V
CL48	10N0F +10% 63.0V
DL48	D-SLP BAV103 200.0V
DL71	D-ZENER BZX55C30 30V 500MIOW
JL60	WIREBARE 22
JL80	0 OHM +0% 100MIOW
LB02	LF 32U0H +4% -4%
LL22	LF 650U0H +5% -5%
LL26	LL 26U5H +10%
RF05	RMF 1R0 OHM +1% 700MIOW
RF06	6K8 OHM +5% 100MIOW
RL02	4K75 OHM +1% 100MIOW
RL04	4K75 OHM +1% 100MIOW
RL05	4K75 OHM +1% 100MIOW
RL06	4K75 OHM +1% 100MIOW
RL19	15K0 OHM +5% 100MIOW
RL45	180K0 OHM +5% 100MIOW
RL48	100K0 OHM +5% 100MIOW
RL49	300K0 OHM +5% 100MIOW
RV20	4K7 OHM +5% 250MIOW
RV20	33K2 OHM +1% 250MIOW

TV ASY W56EGV023X015 56 01	TV ASY W66EGV023X015 66 00
Tube 16/9 24", 28", 32", SF / vectorgun	Tube 16/9 24", 28", 32", SF / vectorgun
10515530	TV PSD CT 17083 38
CL21	15N5F +3.5% -3.5% 1K6V
CL22	27N0F +5% -5% 400.0V
CL24	440N0F +5% -5% 250.0V
CL41	100P0F +10% -10% 50.0V
CL48	100N0F +10% 63.0V
DL48	D-SLP BAV103 200.0V
DL71	D-ZENER BZX55C24 24V 500MIOW
JL60	WIREBARE 22
JL82	0 OHM +0% 100MIOW
LB02	LF 32U0H +4% -4%
LL05	TF-DST TDS29 15314460 10
LL22	LF 650U0H +5% -5%
LL26	LL 30U5H 2519 A0
RF05	1R21 OHM +1% 700MIOW
RF06	4K99 OHM +1% 100MIOW
RL03	6K49 OHM +1% 100MIOW
RL04	6K49 OHM +1% 100MIOW
RL05	6K49 OHM +1% 100MIOW
RL06	2K37 OHM +1% 100MIOW
RL19	13K0 OHM +5% 100MIOW
RL45	390K0 OHM +5% 100MIOW
RL48	220K0 OHM +5% 100MIOW
RV20	180K0 OHM +5% 100MIOW
RV20	47K0 OHM +5% 250MIOW
RV20	100K0 OHM +1% 250MIOW

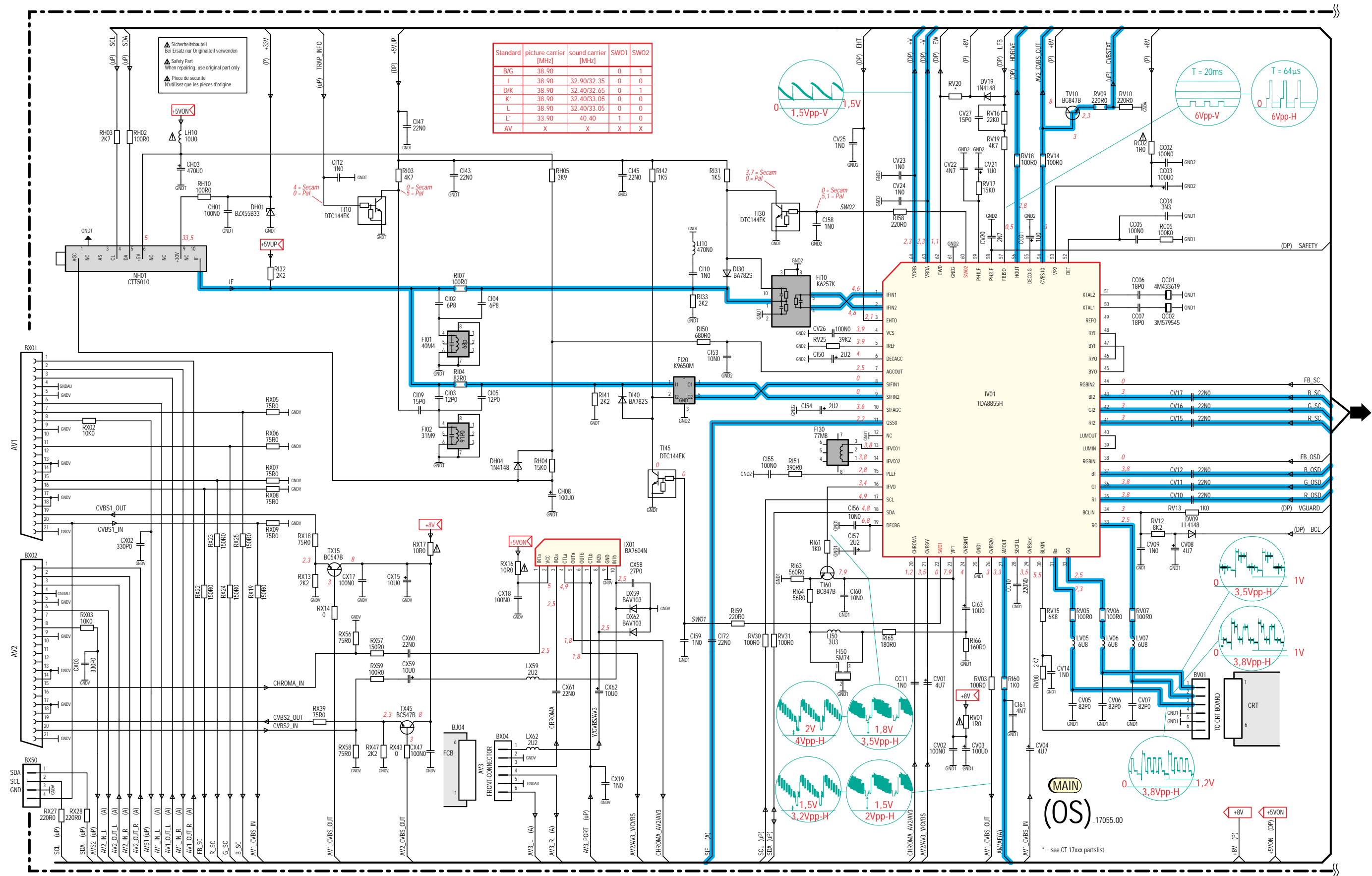
The schematic diagram illustrates the electrical connections for a microcontroller-based system. Key components and their connections include:

- Microcontrollers:** IR01 (ST92R195 CUT 2.2 JAL), IR02 (MX27C4000MC-90), and IR03 (ST24C08M).
- Memory:** MMU0 through MMU5.
- Power Supply:** +5V_VCC, +5V_STBY, +5VUP, and +8V rails with associated decoupling capacitors (CR) and voltage regulators/transistors (TR).
- Signal Lines:** Address (ADDR), Data (DAT), and Control (CS, RST, etc.) lines connecting the microcontrollers to memory and other peripherals.
- Passive Components:** Resistors (RR) for pull-up/pull-down and current limiting, capacitors (CR) for timing and decoupling, and transistors (TR) for switching and protection.
- Tables:**
 - Table 1 (Bottom Right):**

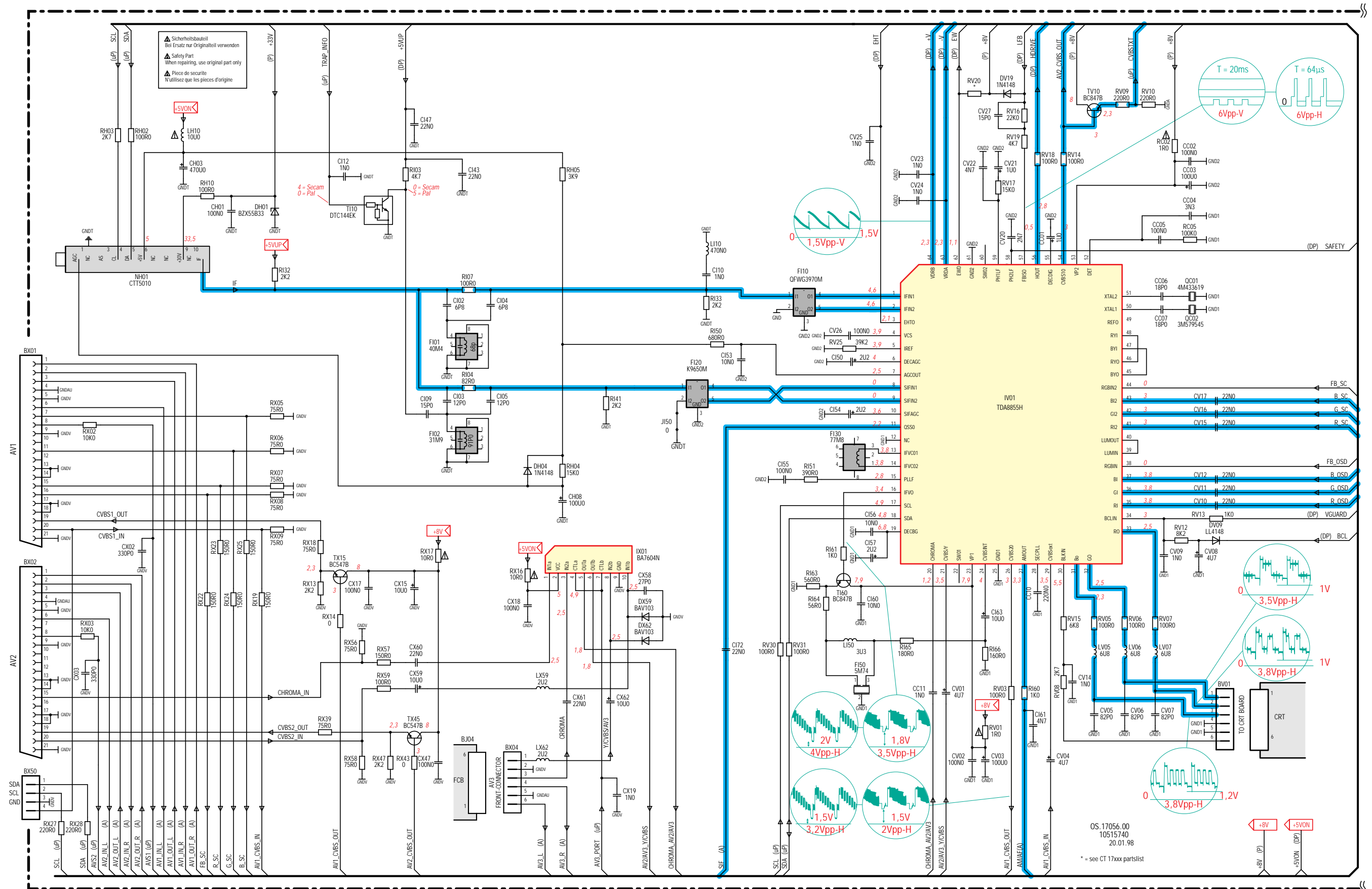
#	IR01
RP 17000 00	ST92R195 CUT 2.2 JAL (10592030)
RP 17001 00	ST92R195 CUT 2.2 JAM (10588150)
 - Table 2 (Bottom Left):**

RR44	4/3
RR48	16/9

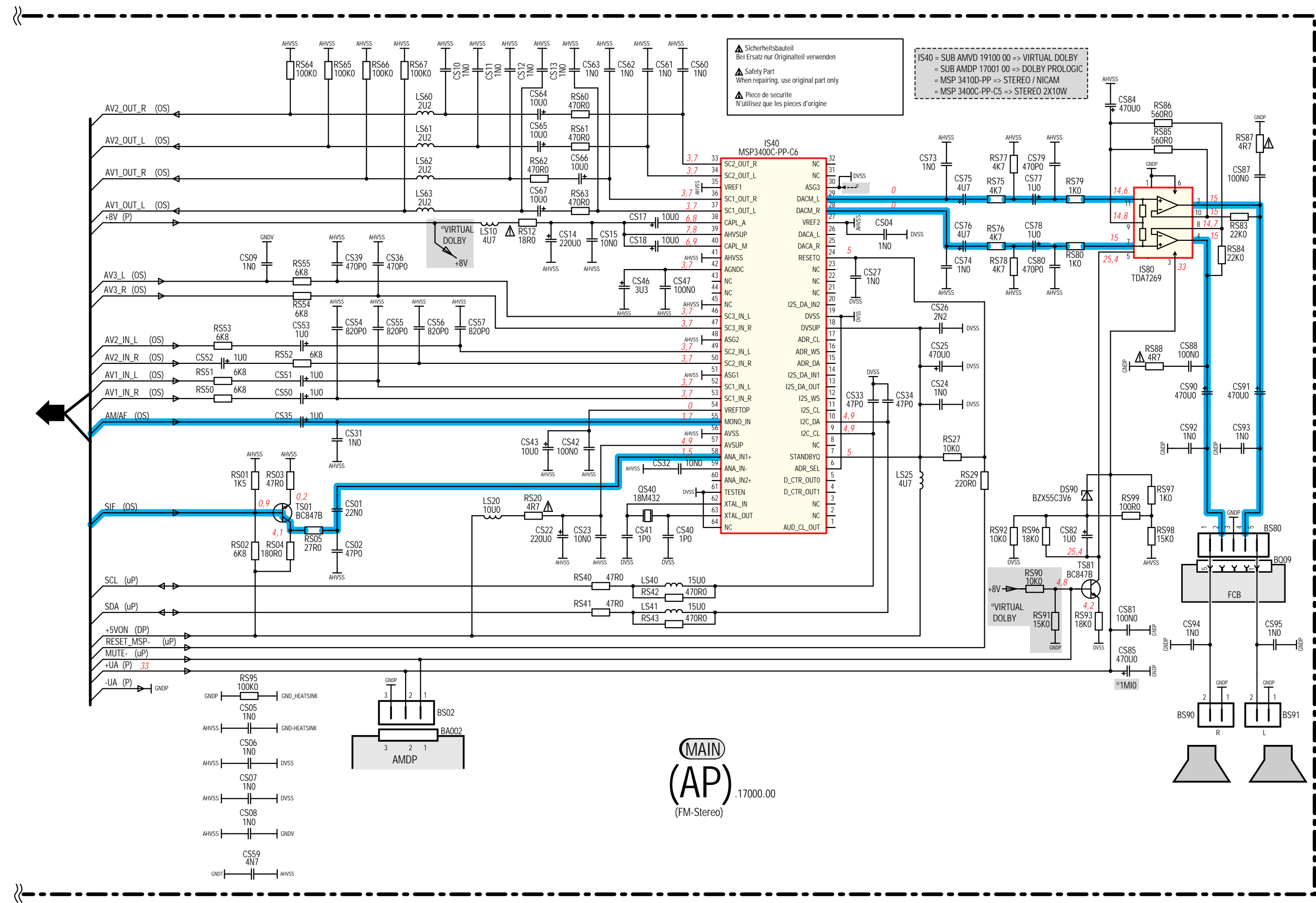
RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO
SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONNECTOR / TRATAMENTO VIDEO



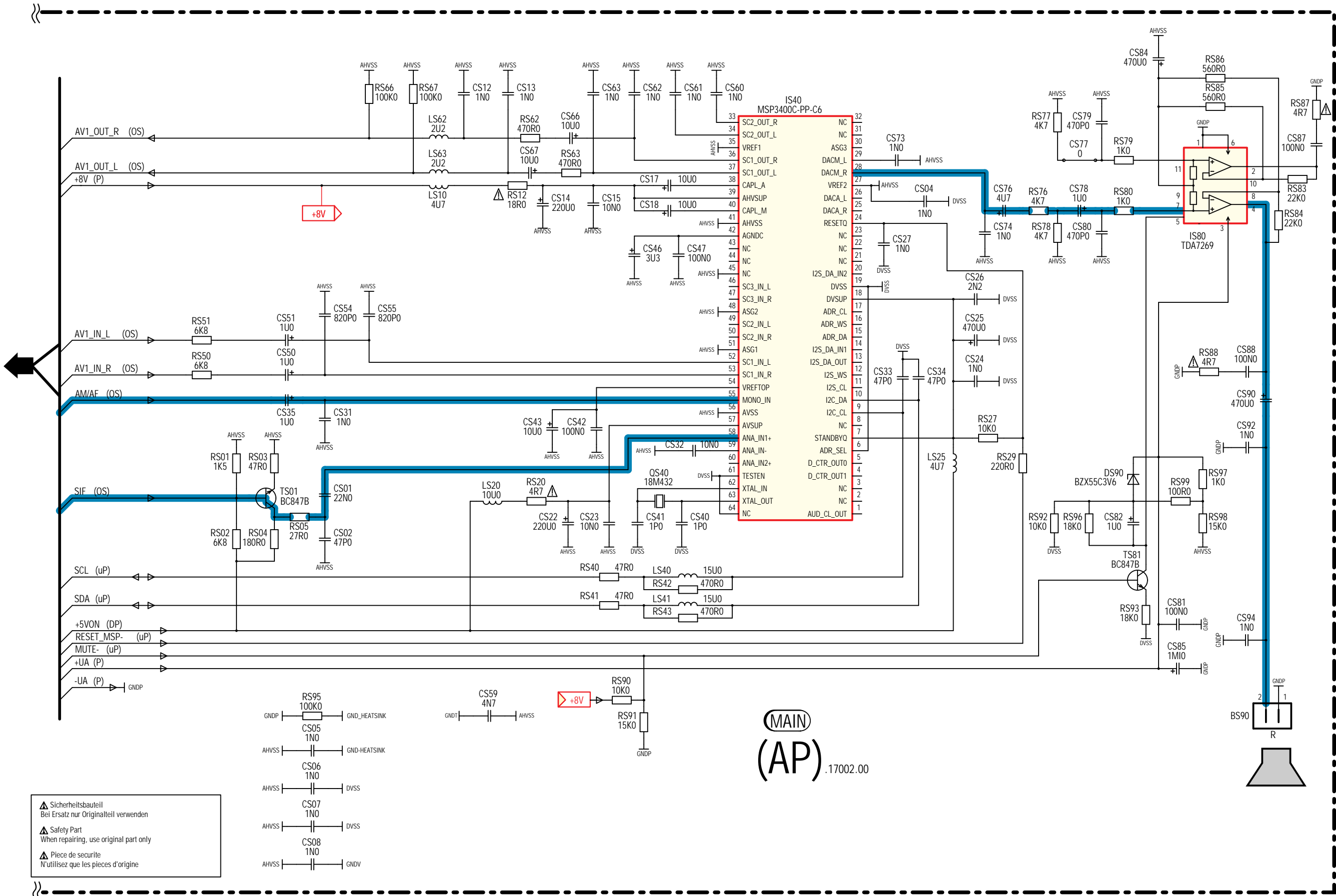
RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR/TRATAMENTO VIDEO



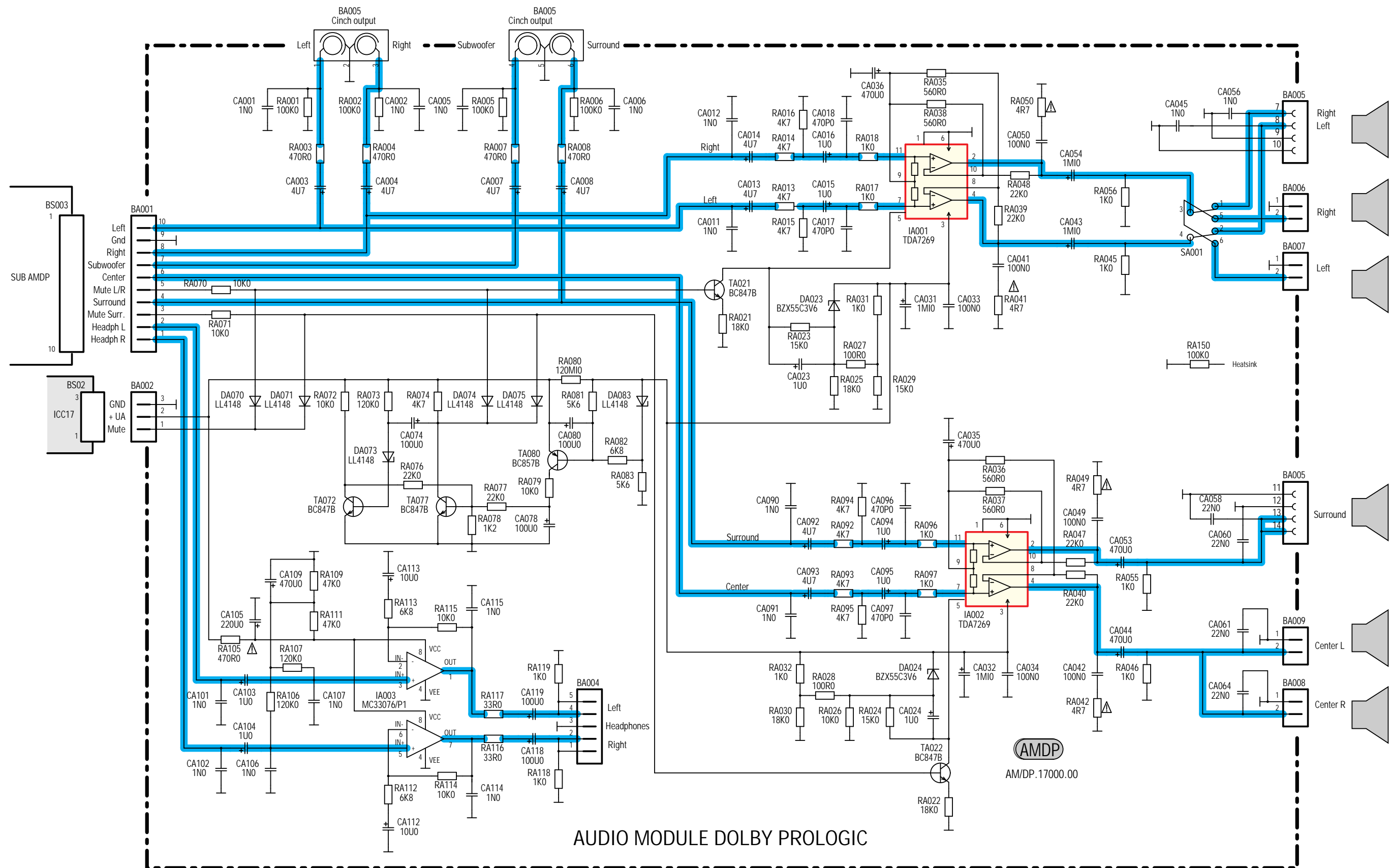
AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE
ESQUEMA DEL AMPLIFICADOR
(STEREO)



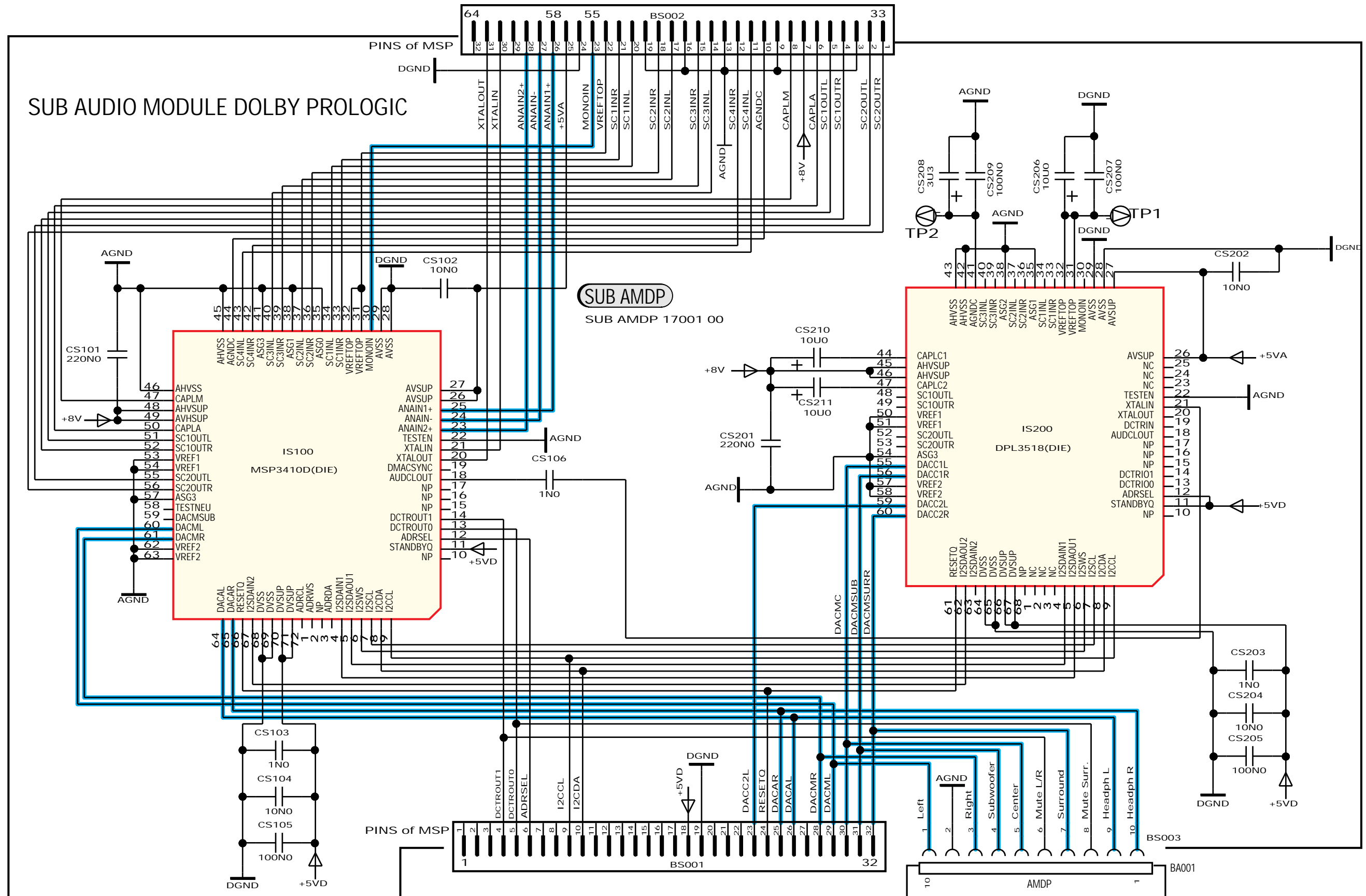
AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERABEITUNG - SCHEMA DELL' AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR (MONO)



AUDIO SIGNAL MODULE DOLBY PROLOGIC - MODULE AUDIO DOLBY PROLOGIC - DOLBY PROLOGIC VERSTÄRKER - MODULO AUDIO DOLBY PROLOGIC
ESQUEMA DEL MÓDULO AMPLIFICADOR DE AUDIO



SUB AUDIO SIGNAL MODULE - SUB MODULE AUDIO - AUDIO SIGNAL SUBMODUL - SUB MODULO AUDIO

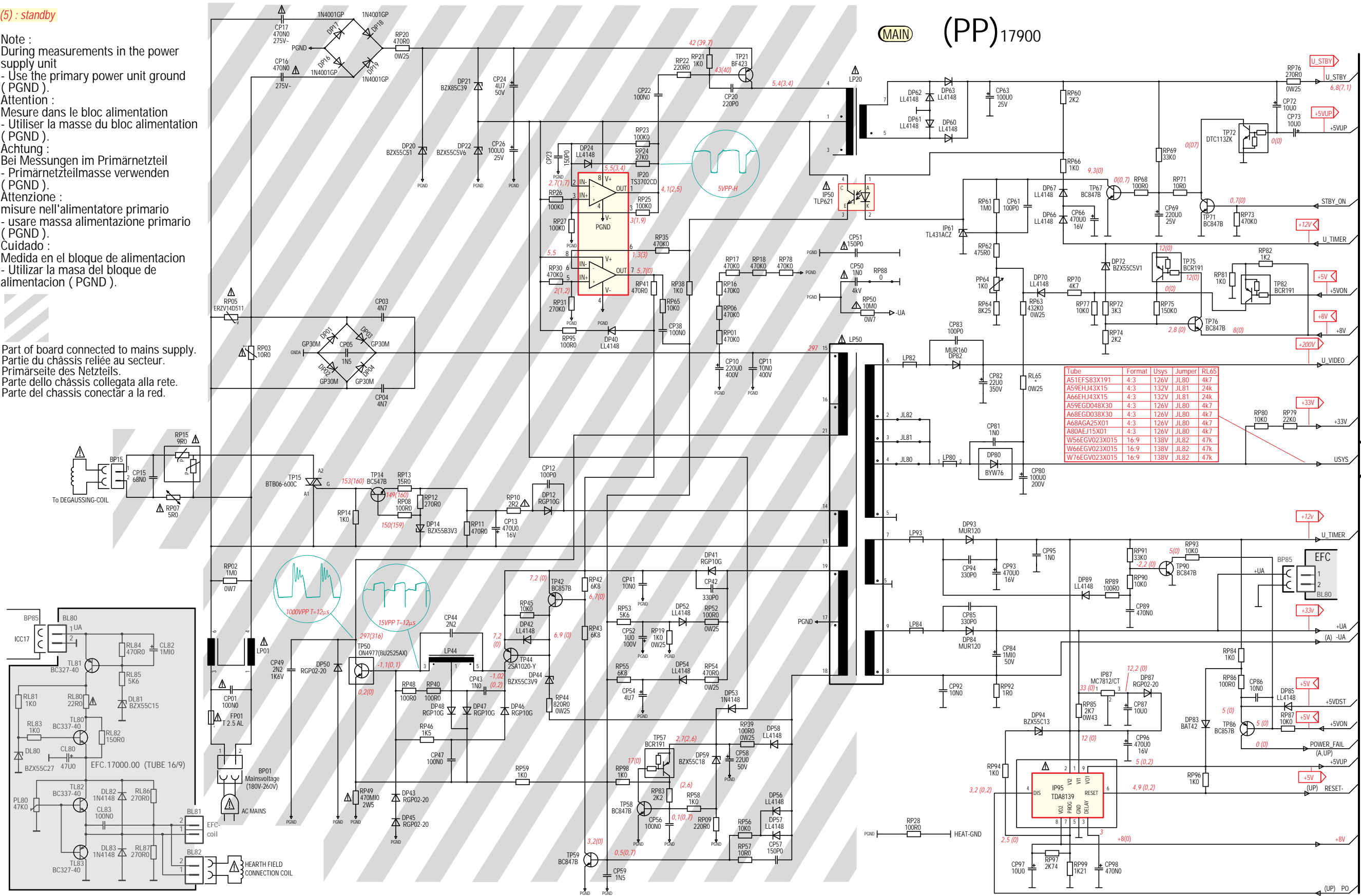


POWER SUPPLY - ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN

(5) : standby

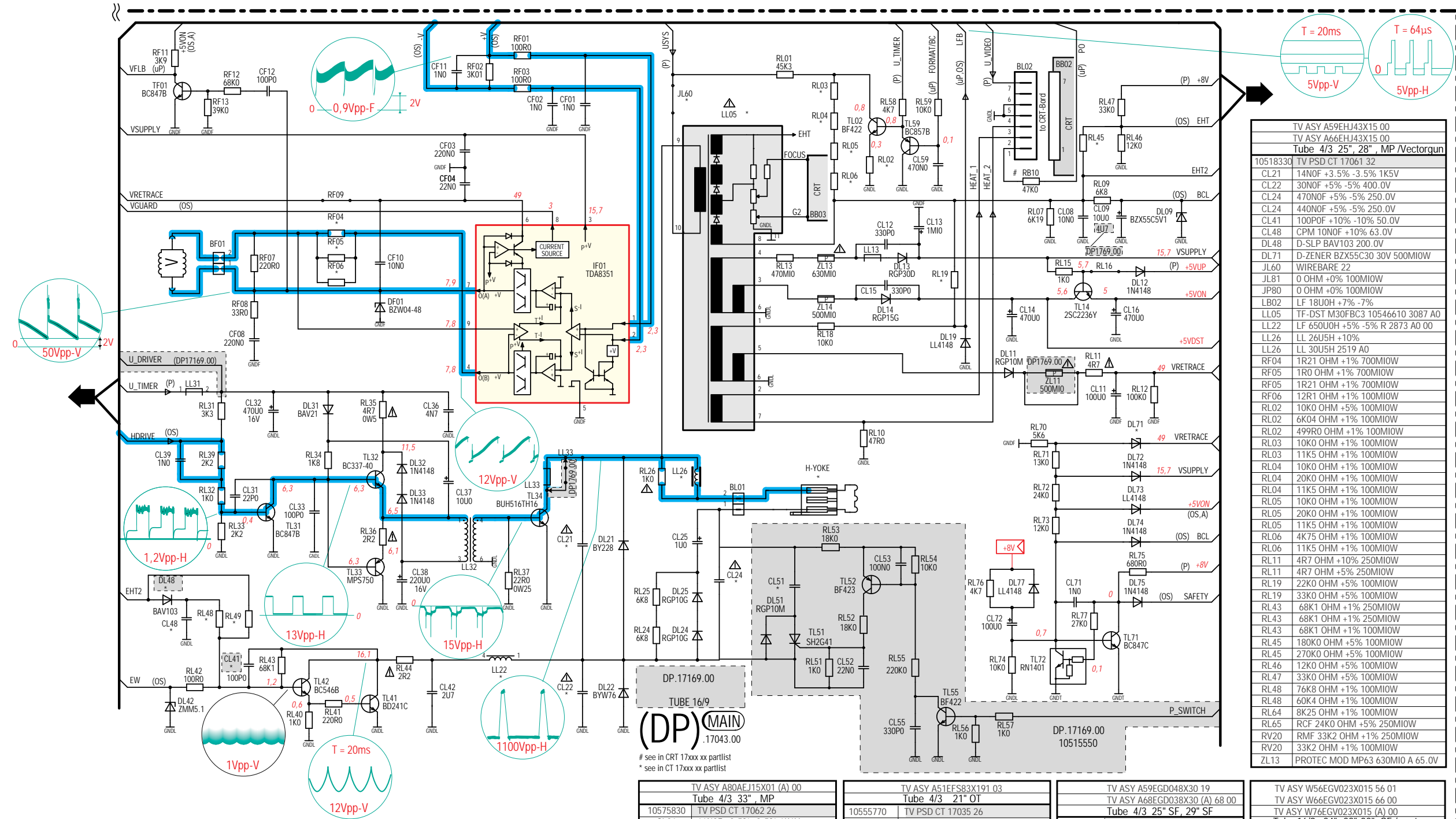
Note :
During measurements in the power supply unit
- Use the primary power unit ground (PGND).
Attention :
Mesure dans le bloc alimentation
- Utiliser la masse du bloc alimentation (PGND).
Achtung :
Bei Messungen im Primärnetzteil
- Primärnetzteilmasse verwenden (PGND).
Attenzione :
misure nell'alimentatore primario
- usare massa alimentazione primario (PGND).
Cuidado :
Medida en el bloque de alimentacion
- Utilizar la masa del bloque de alimentacion (PGND).

Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello chassis collegata alla rete.
Parte del chassis conectar a la red.



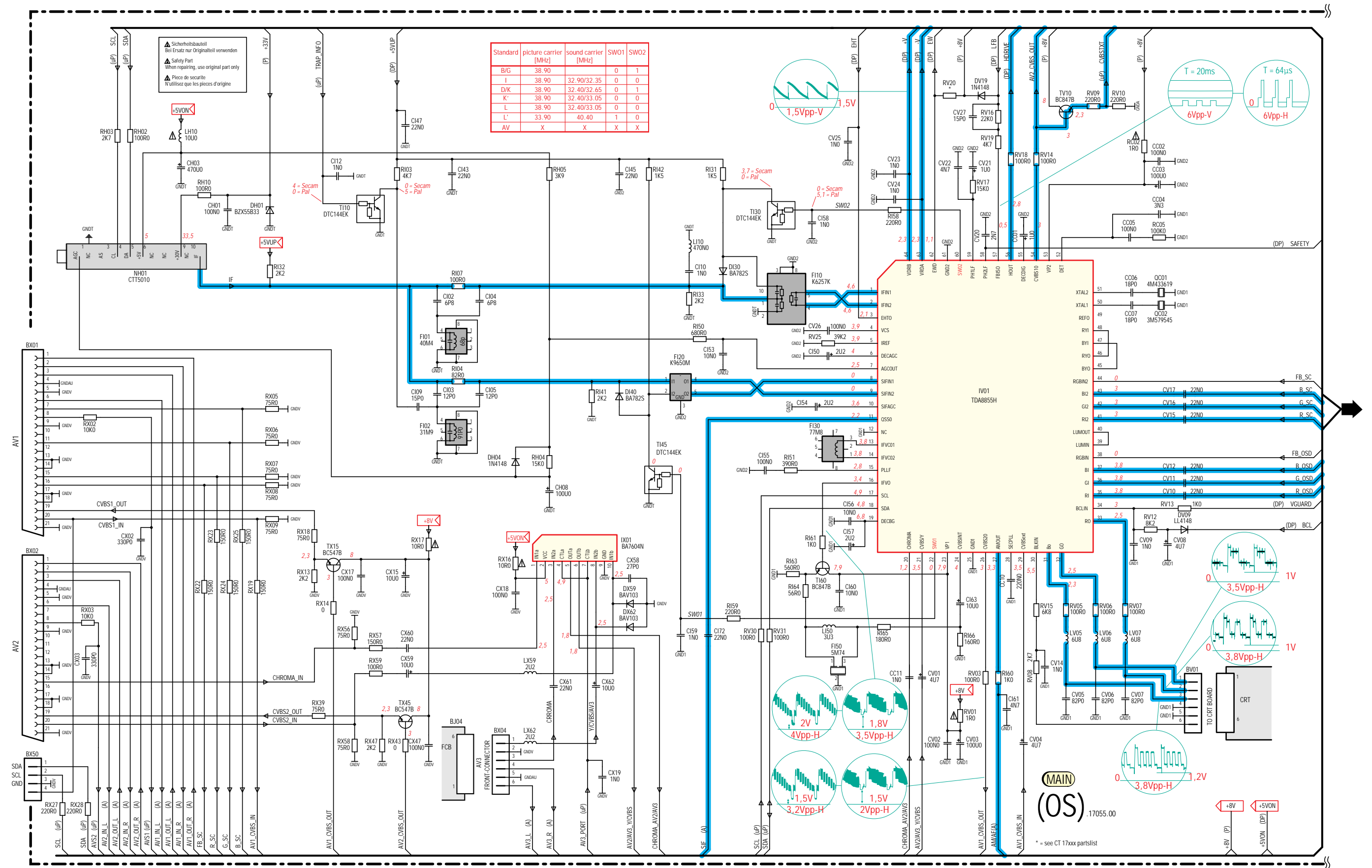
⚠ Use isolating mains transformer - Utiliser un transformateur isolateur du secteur -Einen Trenntrafo verwenden
Utilizar un transformador aislador de red - Utilizzare un trasformatore per isolarvi dalla rete

SCANNING - BALAYAGE - ABLENKUNG - BARRIDO - SCANSIONE

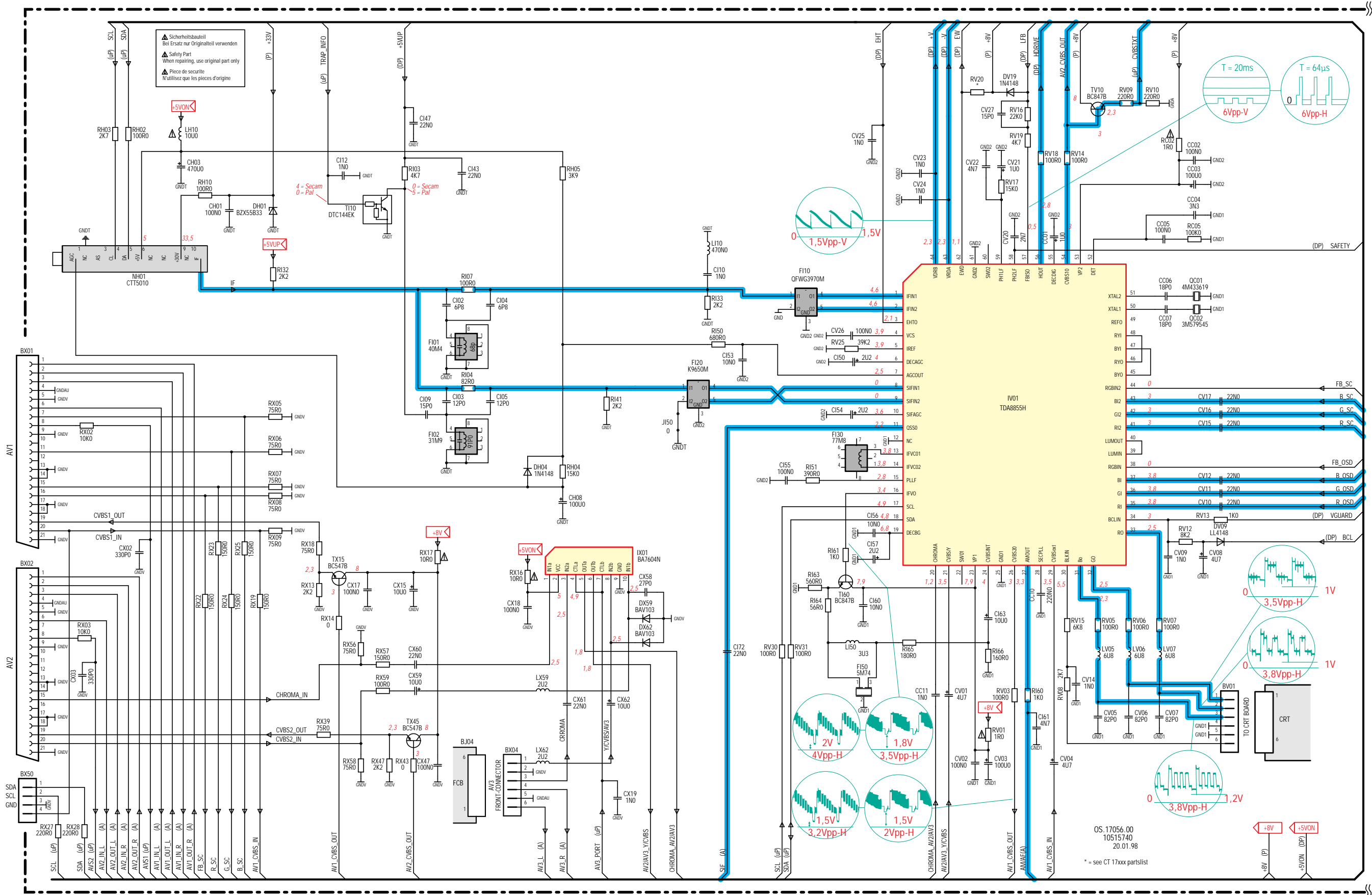


\gg 

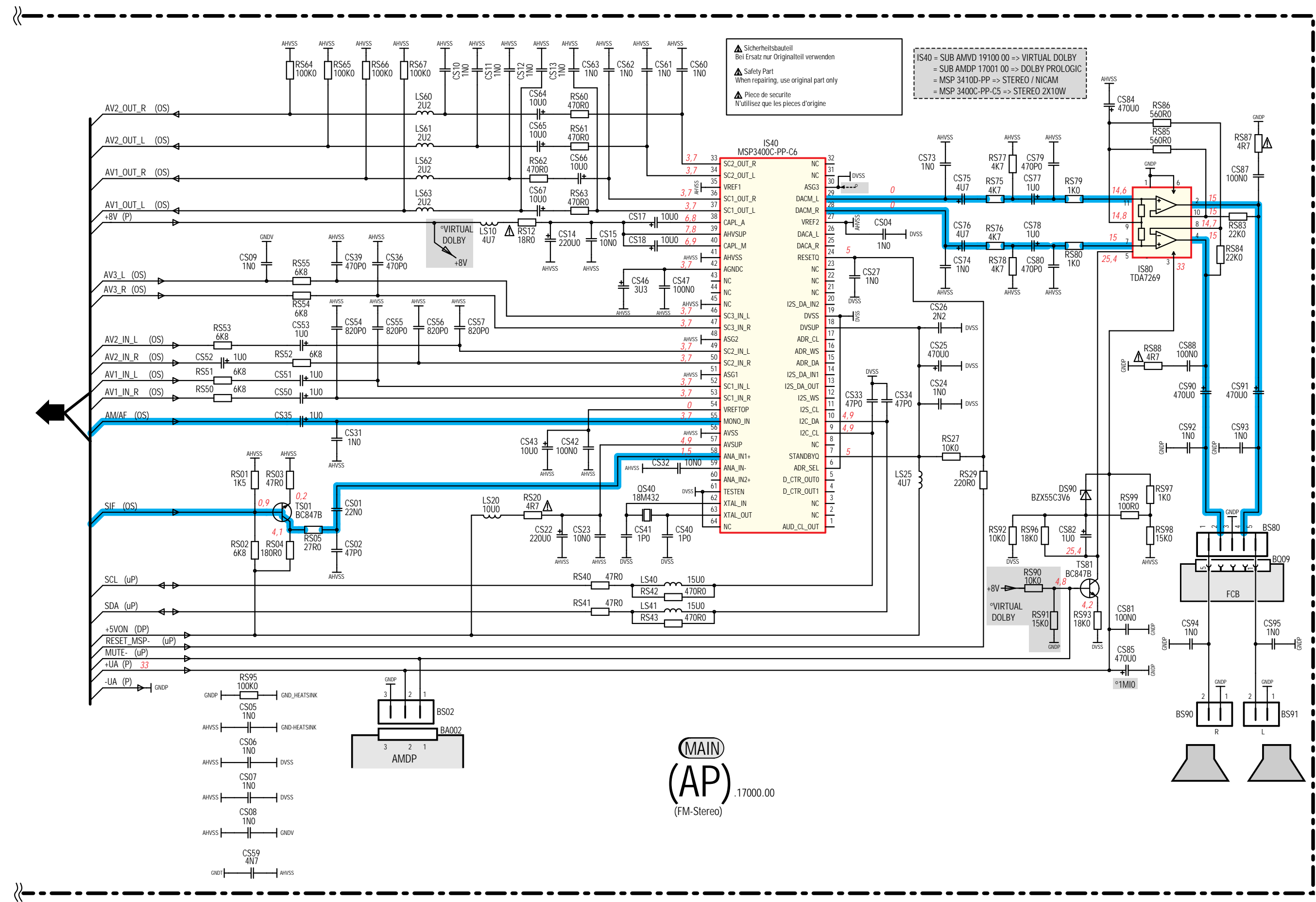
RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR / TRATAMENTO VIDEO



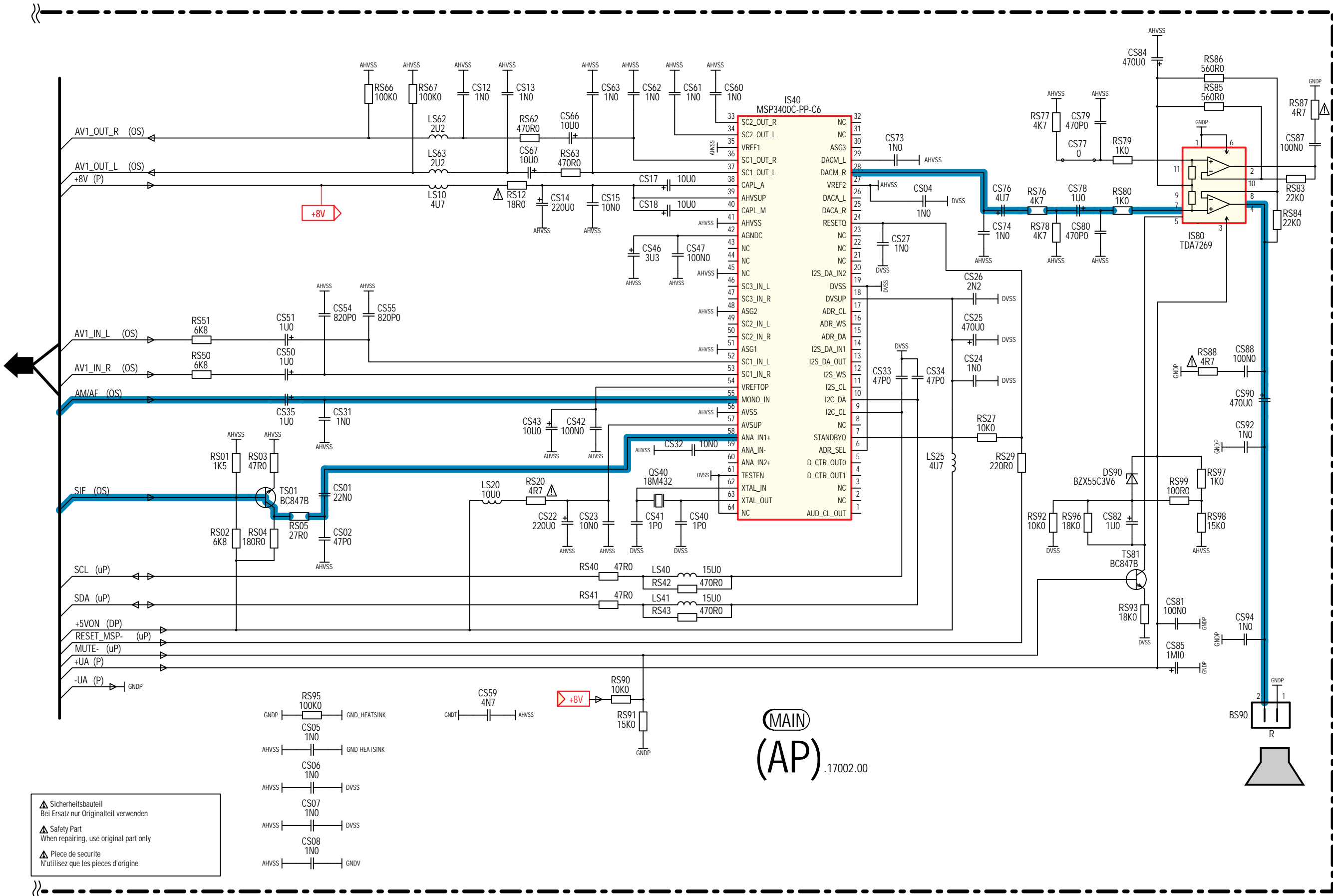
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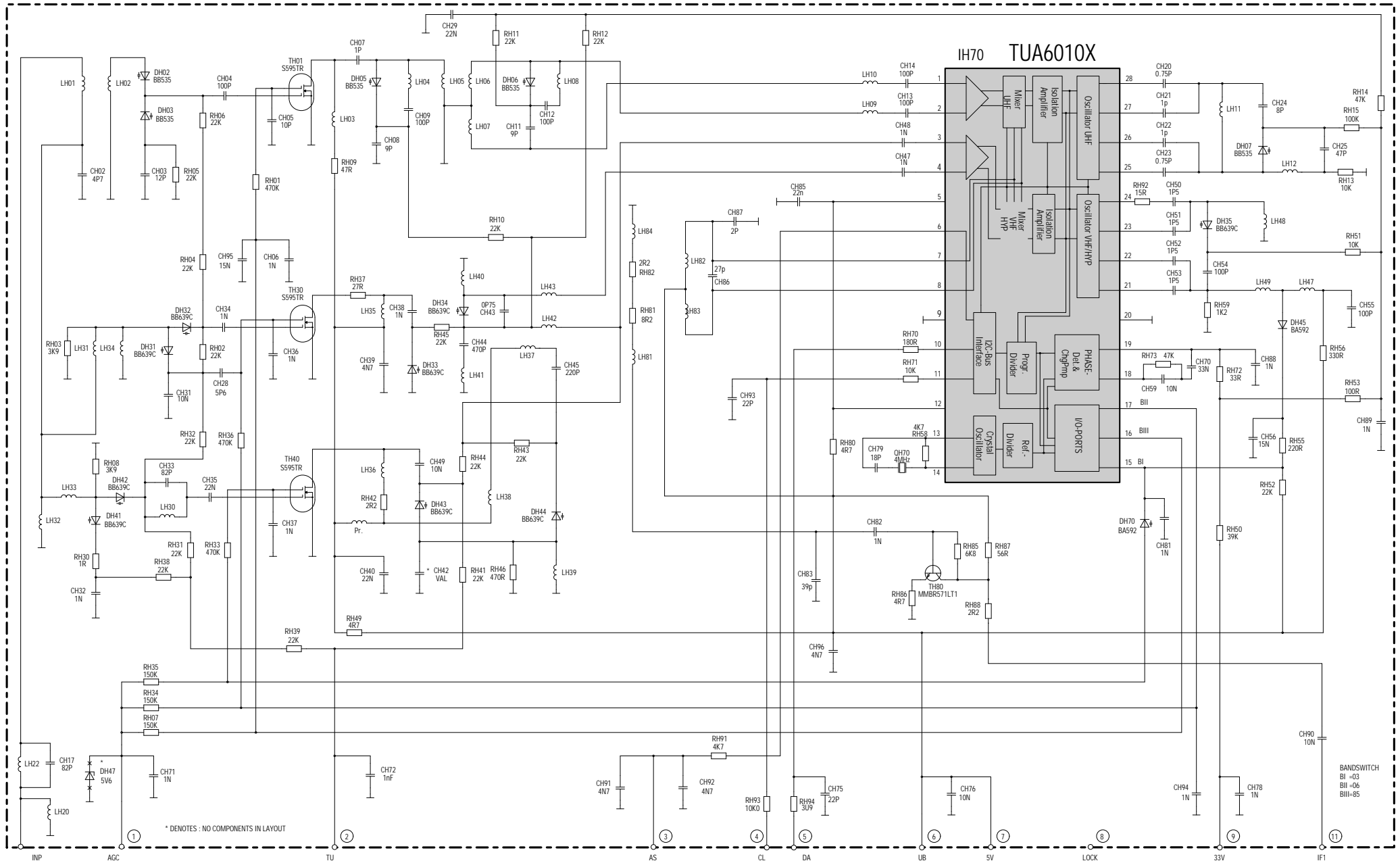


AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE
ESQUEMA DEL AMPLIFICADOR
(STEREO)

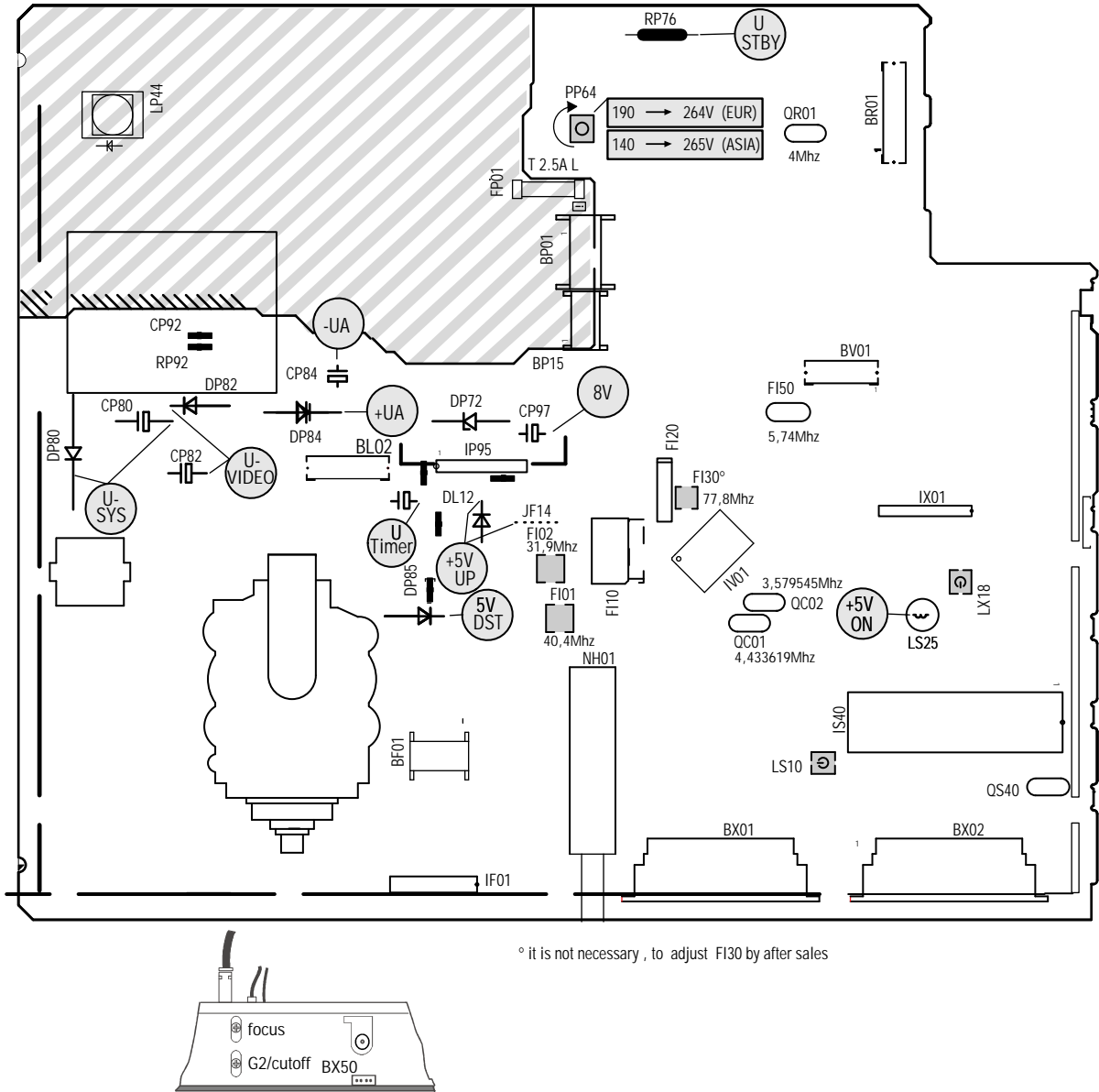


AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERABEITUNG - SCHEMA DELL' AMPLIFICATORE -
ESQUEMA DEL AMPLIFICADOR
(MONO)







**LOCATION OF CONTROLS - EMBLACEMENT DES REGLAGES -
SERVICE LAGEPLAN - POSIZIONE REGOLATORI DI SERVIZIO -
SITUACIÓN DE LOS AJUSTES**



° it is not necessary , to adjust FI30 by after sales

 Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello châssis collegata alla rete.
Parte del chassis conectada a la red.

 Use isolating mains transformer -
Utiliser un transformateur isolateur du secteur -
Trenntrafo verwenden -
Utilizar un transformador aislador de red -
Utilizzare un trasformatore per isolarvi dalla rete

ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONI - AJUSTES

U Sys	PP 64			<table border="1"> <thead> <tr> <th>Tube</th><th>Format</th><th>Usys</th><th>Jumper</th><th>RL65</th></tr> </thead> <tbody> <tr> <td>A51EFS83X191</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A59EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr> <td>A66EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr> <td>A59EGD048X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A68EGD038X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A68AGA25X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A80AEJ15X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>W56EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr> <td>W66EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr> <td>W76EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> </tbody> </table>	Tube	Format	Usys	Jumper	RL65	A51EFS83X191	4:3	126V+/-0,5V	JL80	4k7	A59EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A66EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A59EGD048X30	4:3	126V+/-0,5V	JL80	4k7	A68EGD038X30	4:3	126V+/-0,5V	JL80	4k7	A68AGA25X01	4:3	126V+/-0,5V	JL80	4k7	A80AEJ15X01	4:3	126V+/-0,5V	JL80	4k7	W56EGV023X015	16:9	138V+/-0,5V	JL82	47k	W66EGV023X015	16:9	138V+/-0,5V	JL82	47k	W76EGV023X015	16:9	138V+/-0,5V	JL82	47k
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IF Alignment Alignement FI	trap 40,4Mhz FI 01	Switch set to standard BG Commuter le TV au standard BG IF Signal 40,4MHz (BG) 31,9MHz (BG)		Adjust FI01 for minimum value at 40,4Mhz																																																							
	trap 31,9Mhz FI 02	50 mV 		Adjust FI20 for minimum value at 31,9Mhz																																																							
U G2 / cutoff	SCREEN	 AV (no Signal, black screen)	<p>CRT IB01: pins 9 / 12 / 15</p> <p>highest output</p>																																																								
FOCUS	FOCUS LL05	<p>Test pattern (standard values)</p>		Sharp picture																																																							

I - ENTER/EXIT SERVICE MODE - ENTREE/SORTIE DU MODE SERVICE

1 ACCESSING THE SERVICE MODE

TV Control Panel Access

- Switch the TV into **"Standby"** mode by pressing the Standby button on the RCU.
- Switch **"OFF"** the mains supply to the TV and wait for the LED to extinguish.
- Whilst holding depressed the **PR** - and **VOL**- (8s), switch **"ON"** the mains supply to the TV.
- Once initialised, the **Main Service Menu** will appear on the screen of the TV.

Soft-Ver. V1.00-0 0080
Config. A5- - -N
Serial-No. 103465071

► QUIT
TUBE
SETUP
GEOMETRY
VIDEO
IF

Please Note:

In the service mode :

- The **CHILD LOCK** function is re-initialised. The **LOCK** function (PIN number) is ignored.
- All Wake-up/Sleep timer settings are **CLEARED**.
- SCART socket pin 8 switching voltages are ignored.
- AV-Link, WSS Detection, EPG and TELETEXT functions are disabled.
- Automatic standby mode switching functions (no signal conditions) are disabled.
- Brightness, Colour and Contrast are set to factory defaults.
- Sharpness settings are set to MID position.
- Contrast Expand is set to LOW.
- Automatic **INSTALL** mode is disabled.
- FORMAT** and **ZOOM** are reset to factory defaults.

2 TEMPORARY EXIT FROM SERVICE MODE

- Press the **"EXIT"** button on the RCU.
- Pressing the **"MENU"** button on the RCU will activate the customer menus.

- The Service Menu can be re-entered by pressing the **"BLUE"** button on the RCU.

3 EXITING FROM SERVICE MODE

Remote Control

TV Control Panel

ON/OFF key or "Stand-by" buttons

- Select the **"QUIT"** line of the **"Main Service Menu"**.

- Press **"<"**, **"OK"** or **">"** button

- Press **"VOL.+"** button

- TV mode.

Values or adjustment not **"STORED"** before exiting the service mode will **NOT** be **"SAVED"** in the NVM.

1 ACCES AU MODE SERVICE

Accès avec le clavier du téléviseur

- Commuter le téléviseur en position de veille avec la télécommande. Eteindre le téléviseur par l'interrupteur secteur (attendre l'extinction complète du voyant).
- Tout en appuyant sur les touches **PR** - et **VOL** -, mettre le TV en service à l'aide de la touche **M/A**.
- Maintenir enfoncées les touches **PR** - et **VOL** -. (8s)
Le menu suivant apparaît.

Soft-Ver. V1.00-0 0080
Config. A5- - -N
Serial-No. 103465071

► QUIT
TUBE
SETUP
GEOMETRY
VIDEO
IF

Note :

En mode service:

- Le verrouillage parental est effacé (réinitialisé).
- La fonction de verrouillage (Pin number) est ignorée.
- La programmation des heures «réveille/matin» est annulée.
- Possibilité de passer en mode service avec commutation lente active.
- AV- Link , la détection WSS, l'EPG et le Vidéotexte ne sont pas validés.
- La fonction de stand-by automatique en cas d'absence de signal d'antenne n'est pas validée.
- Les valeurs de réglages usine sont affectées au contraste, à la couleur et à la lumière.
- Le contour est appelé à sa valeur moyenne.
- L'expansion contraste est au niveau bas.
- Le mode «ambiance «Light sensor» n'est pas valides.
- Zoom et format ignorées.

2 SORTIE TEMPORAIRE DU MODE SERVICE

- Utiliser la touche Exit de la télécommande.
- Le menu utilisateur peut être accessible via la touche «Menu».

- Pour entrer à nouveau dans le mode service utiliser la touche bleue.

3 SORTIE DEFINITIVE DU MODE SERVICE

télécommande

clavier du téléviseur

Inter M/A ou Stand-by

- Aller au point **"QUIT"** dans le menu principal du mode service.

- Appuyer sur **"<"**, **"OK"** ou **">"**

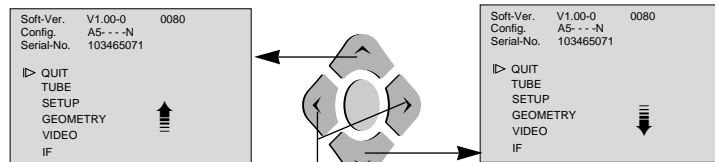
- Appuyer sur **"VOL.+"**

- Mode TV.

Les valeurs ou réglages non mémorisées avant la sortie ne seront pas écrites en NVM.

II - NAVIGATION INSIDE THE SERVICE MODE - DEPLACEMENT DANS LE MODE SERVICE FUNCTIONS WALLIN SERVICE MODE - OPZIONI NEL SERVICE MODE - BUSQUEDA EN MODO SERVICIO

1 REMOTE CONTROL - TELECOMMANDE - FERNBEDIENUNG TELECOMANDO - MANDO A DISTANCIA

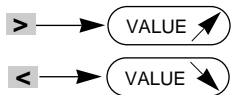


Naviagation up

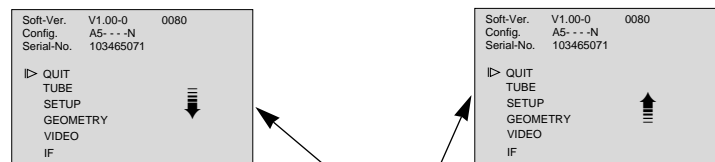
Naviagation down

- Select option
- Option anwählen
- Selezionare l'opzione
- Seleccionar opción

- "Change" value
- Wert "ändern"
- "Cambiare" valore
- "Cambiar" valor



2 TV CONTROL PANEL - CLAVIER TV - TASTATUR DES FERNSEHGERÄTS - COMANDI DEL TELEVISORE -

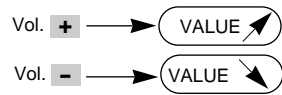


Naviagation down

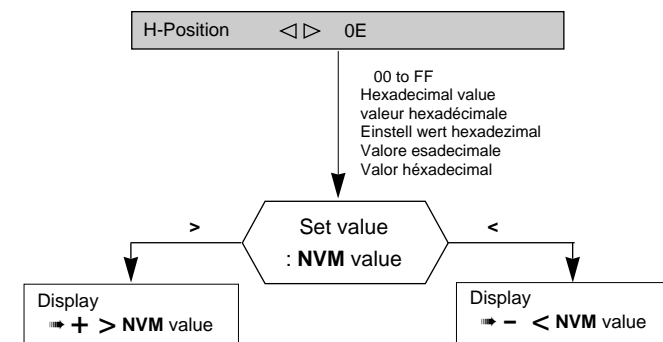
Naviagation up

- Select option
- Option anwählen
- Selezionare l'opzione
- Seleccionar opción

- "Change" value
- Wert "ändern"
- "Cambiare" valore
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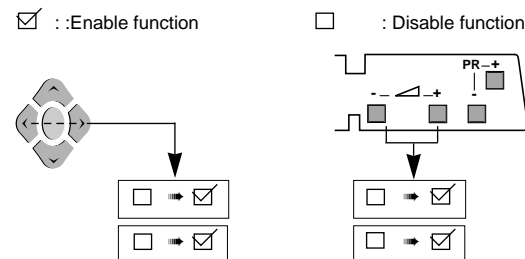


3 DISPLAYING THE VALUE OF THE SETTING - AFFICHAGE DES VALEURS - ANZEIGE DES EINSTELL WERTS VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - VISUALIZACION DEL VALOR DE AJUSTE



4 TOGGLE FUNCTIONS - VALIDATION DES FONCTIONS EIN-UND AUSSCHALT FUNKTIONEN - FUNZIONI DI COMMUTAZIONE - FUNCION CONMUTACION

To enable a function check (tick) ☒ the box.
Pour valider une fonction cocher ☒ la case correspondante
Zum Implementieren einer Funktion das Kontrollkästchen ☒ aktivieren (ankreuzen)
Per implementare una funzione di verifica, (vistare) ☒ la casella
Para poner en fucionamiento una función verifique (señale) ☒ la casilla



5 STORING VALUES IN MEMORY - MEMORISATION DES VALEURS - SPEICHERN DER WERTE - MEMORIZZAEZ I VALORI - VALORES ALMACENADOS EN LA MEMORIA

After setting, the values are stored in NVM.
Après réglages les valeurs sont mémorisées en NVM.
Nach dem Einstellen werden die Werte im NVM gespeichert.
Dopo la regolazione i valori vengono memorizzati in NVM.
Después del ajuste, los valores son almacenados en NVM

The box ☐ becomes ☒
During alignment, values are temporarily stored in RAM.
En cours d'alignement les valeurs sont mémorisées temporairement en RAM
Während des Abgleichs werden die Werte vorübergehend im RAM gespeichert
Durante l'allineamento i valori vengono memorizzati provvisoriamente sulla RAM
Durante el ajuste, los valores son almacenados temporalmente en RAM

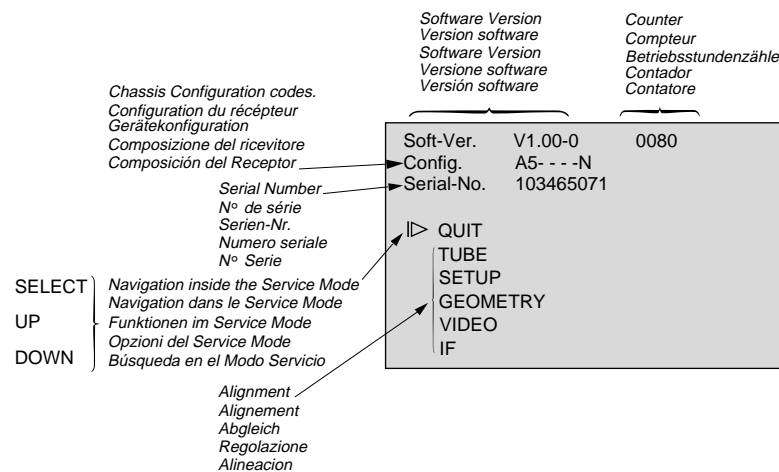
Store Copies RAM values into NVM
Copie la valeur RAM en NVM
Kopieren des Werts von RAM nach NVM
Copiare i valori RAM in NVM
Copiar valores RAM en NVM

Restore Copies all values from NVM into RAM.
Copie toutes les valeurs des données NVM en RAM
Kopiert alle NVM-Datenwerte in den RAM
Copiare tutti i valori da NVM sulla RAM
Copia todos los valores de NVM a RAM

ROM Default All the default values of a page in use are stored in RAM.
L'ensemble des valeurs par défaut d'une page courante est chargé en RAM.
Sämtliche Standardwerte der aktuellen Seite werden im RAM geladen
Tutti i valori di default di una pagina in uso vengono memorizzati sulla RAM
Todos los valores por defecto de la página en curso están almacenados en RAM.

III - LITE-MENU FOR FIELD SERVICE MODE - MENUS DU MODE SERVICE

1 MAIN MENU - MENU PRINCIPAL



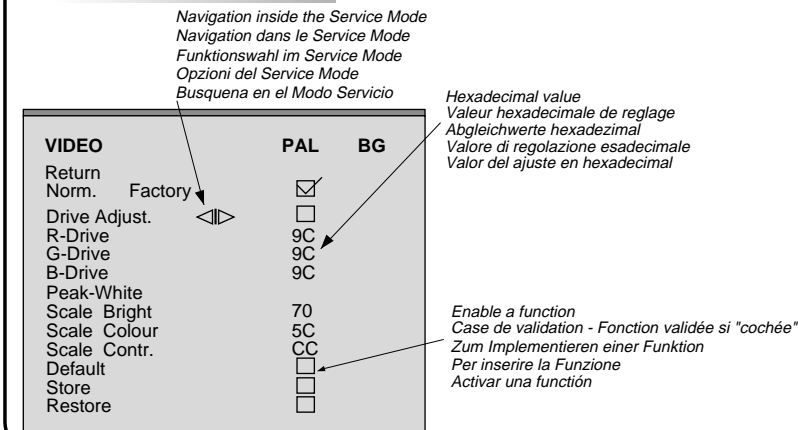
TV CONFIGURATION - CONFIGURATION DU TV - GERÄTEKONFIGURATION - CONFIGURAZIONE DEL TV - CONFIGURACIÓN DEL TV

Config.	A1Z-DKC
Character 1 : Tube type : «A» = 4/3 , «W» = 16/9 Character 2 : Chassis type : «5» = 50Hz, Character 3 : Zoom available : «Z» = yes, «-» = not Character 4 : Ambient Sensor : «S» = detected, «-» = not Character 5 : Dolby : «D» = detected, «-» = not Character 6 : AV Link detected : «K» = IR link detected, «-» = not Character 7 : Chassis Variant: «N» = Nicam, «S» = Stereo	
Serial-N0.	A16-----
Character 1 : Factory : «A» = Angers , «C» = Celle, «T» = Tarancon Character 2 : Year : «G» = 1996, «H» = 1997 etc.. Character 3 : Month, from : «1» = January to «C» = December Character 4-9 : Serial N0.	

TIME COUNTER - COMPTEUR DE TEMPS - BETRIEBSSTUNDENZÄHLER - CONTATORE - CONTADOR

The counter indicates the TV's number of service hours. It counts from 0 to 65535 hours.
The display is hexadecimal.
Le compteur de temps indique le nombre d'heures de service du TV. Il compte de 0 à 65535 heures. L'affichage est en hexadécimal.
Der Zähler zeigt an, wieviele Stunden der Fernseher in Betrieb ist. Die Anzeige ist hexadezimal.
Il contatore indica il numero di ore di servizio del TV. Puo' contare da 0 a 65535. La visualizzazione è esadecimale.
El contador indica el número de horas de servicio de la TV. Cuenta de 0 a 65535 horas. El visualizador es hexadecimal.

2 SUBMENU - SOUS-MENU



TUBE	SETUP	GEOMETRY	VIDEO	PAL	BG	IF
Return	Return	Return	Return			Return
Tube type	Clear Progs. ▶▶	V- Slope 7C	Norm.	Factory <input checked="" type="checkbox"/>		AGC Take Over ◀▶ 88
A66ECY... Store <input checked="" type="checkbox"/> ◀▶	Kbd. Config. Default	V-Amplitude 6C	Drive Adjust. ◀▶	<input type="checkbox"/>		
Restore <input type="checkbox"/>	WSS <input type="checkbox"/>	V-Position ◀▶ 7C	R-Drive 9C	<input type="checkbox"/>		FFI - Bit <input type="checkbox"/>
	Default <input type="checkbox"/>	Blanking On <input type="checkbox"/>	G-Drive 9C	<input type="checkbox"/>		Default <input checked="" type="checkbox"/>
	Store <input type="checkbox"/>	S - Correction 54	B-Drive 9C	<input type="checkbox"/>		Store <input checked="" type="checkbox"/>
	Restore <input type="checkbox"/>	H-Position 94	Peak-White 70	<input type="checkbox"/>		Restore <input checked="" type="checkbox"/>
		H-Amplitude 70	Scale Bright 5C	<input type="checkbox"/>		
		EW-Amplitude 78	Scale Colour CC	<input type="checkbox"/>		
		EW-Trapezium 98	Scale Contr. <input type="checkbox"/>	<input type="checkbox"/>		
		Default <input type="checkbox"/>	Default <input type="checkbox"/>	<input type="checkbox"/>		
		Store <input type="checkbox"/>	Store <input type="checkbox"/>	<input type="checkbox"/>		
		Restore <input type="checkbox"/>	Restore <input type="checkbox"/>	<input type="checkbox"/>		

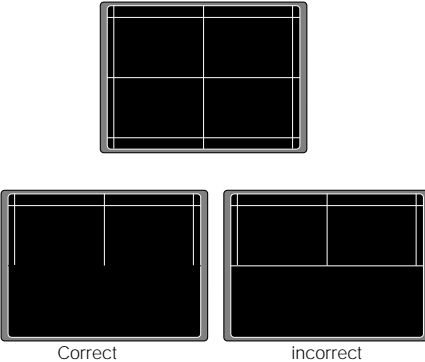
TUBE
<p>Return</p> <p>Closes the sub-menu and returns to the "Main Service Menu". Press </> on the RCU or VOL+/VOL- on TV front panel.</p> <p>Retourne au menu principal.</p> <p>Verlassen des Untermenüs, das Hauptmenü des service Modes erscheint</p> <p>Chiude il sottomenu e fa apparire il menu principale Field Service Mode.</p> <p>Cierra el submenú. El menú Field Service Mode aparece</p> <p>Press </>: remote control; Vol. +/-: TV keyb.</p>
<p>Tube type</p> <p>After replacing the NVM, the correct tube type number must be entered (6 characters). Once entered, the tubes geometry and video default vales are immediately activated. Variable geometry and video parameters are written to the NVM when the "STORE" line is selected.</p> <p>See table below for tube type numbers.</p> <p>Definit le tube exact après changement de NVM.</p> <p>Les nouvelles valeurs de tubes (avec video et géométrie) sont actives de suite.</p> <p>Les paramètres de vidéo et de géométrie sont chargés en NVM lorsque STORE est sélectionné. Voir liste ci-dessous.</p> <p>Nach Tausch des NVM den bildröhrentyp (6 Ziffern) auswählen. Die neuen Geometrie- und Video-defaultwerte werden sofort aktiv. Variable Geometrie- und Videowerte werden durch Speichern mit "STORE" ins NVM geschrieben. Bildrohrauflistung : siehe unten.</p> <p>Scegliere il tubo appropriato dopo aver sostituito la NVM; i 6 caratteri che indicano il nuovo tipo di tubo, richiamano i valori video e geometria di default. I parametri per video e geometria vengono caricati nella NVM</p> <p>Definir el tubo correcto después de haber cambiado el NVM. 6 caracteres. Los nuevos valores de tipo de tubo (con la video y la geometría por defecto) se activan inmediatamente. Los parámetros variables de geometría y vídeo se graban en el NVM al seleccionar la función Store. Vea más abajo la lista de tubos.</p>

➡ After setting		➡ Store (+) <input checked="" type="checkbox"/>
Tube Name	LIST name	Description
A51EFS83X191	A51EFS	4: 23: 21° AF: Ak-Mask: Coty-M
A59EHJ43X15	A59EHJ	4: 25: 25° MP: Ak-Mask: Vector
A66EHJ43X15	A66EHJ	4: 28: 28° MP: Ak-Mask: Vector
A68EGD038X30	A68EGD	4: 29: 29° SF: Invar: Vector
A80AEJ13X01	A80AEJ	4: 33: 33° MP: Ak-Mask: Coty-M
A59EGD048X30	A59EGD	4: 25: 25° SF: Invar-Mask: Vector
A68AGA25X01	A68AGA	4: 29: 29° VHP: Ak-Mask: Coty-M
VW56GE02X015	VW56GE	16: 9: 24° SF: Invar-Mask: Vector
VW66GE02X015	VW66GE	16: 9: 28° SF: Invar-Mask: Vector
VW76GE02X015	VW76GE	16: 9: 32° SF: Invar-Mask: Vector

















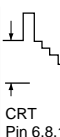











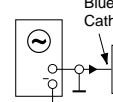
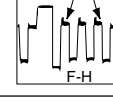
<p>SETUP</p> <p>Return Closes the sub-menu and returns to the “Main Service Menu”.</p> <p>Retourne au menu principal.</p> <p>Verlassen des Untermenüs</p> <p>Chiude il sottomenu e fa apparire il menu principale Field Service Mode.</p> <p>Cierra el submenú. El menú Field Service Mode aparece.</p> <p>Press < / >: remote control; Vol. +/-: TV keyb.</p>	
<p>Clear Prog.</p> <p>Clears all programmes STORED in memory and RESETS all PICTURE and SOUND settings to the factory default values.</p> <p>The AUTO INSTALL (out of factory) mode can be initialised by a long press (> 5sec): of the selection button.</p> <p>Efface tous les programmes mémorisés. valeurs SON et IMAGES: valeurs usines.</p> <p>Pour sortir des valeurs usine :</p> <p>Selection : Long press.2,5s</p> <p>Löscht alle Programme und ersetzt alle Ton- und Bildeinstellungen durch Fabrikwerte. Nach erneutem Einschalten erscheint das Installationsmenü.</p> <p>Anwahl: 2,5s drücken</p> <p>Clear Prog. Cancella tutti i programmi in memoria.I valori analogici SUONO e IMMAGINE vengono riportati a livello di default. Per ristabilire le condizioni di uscita fabbrica, selezionare la funzione e premere per 2,5sec</p> <p>Programa de borrado.</p> <p>Borra todos los programas almacenados en la memoria. Valores analógicos de SOUND PICTURE: valores de fábrica.Regreso a la TV para "salir del modo fábrica".Selección: Presión larga igual a 2,5 s.</p> <p><input checked="" type="checkbox"/> active-aktiv <input type="checkbox"/> No active-inaktiv</p>	
<p>Kbd. Config</p> <p>Factory adjusted</p> <p>Reserve au reglage usine</p> <p>Reserviert für fabrikinstellungen</p> <p>Riservato alla regolazione di fabbrica</p> <p>Kbd. Config < > Default</p>	
<p>WSS Automatic detection of DOLBY surround sound and 16/9 Format pictures via Teletext line number 23 is valid on all programmes.</p> <p>Sélection du process WSS valid pour tous programmes</p> <p>WSS (nur bei 16:9 oder Dolby) Auswertung der Zeile 23 zur automatischen Format umschaltung und Dolby umschaltung</p> <p>Identificazione "auto-surround" y "format" tramite il teletexto, decodificando la riga 23. La selezione di WSS è valida per tutti i programmi.</p> <p>Detección "auto-surround" y "format" a través de la línea 23 de Teletext.La selección del procesamiento WSS es válida para todos los programas.</p> <p><input checked="" type="checkbox"/> detect.enable- aktiv <input type="checkbox"/> disable-inaktiv</p>	

GEOMETRY	
Return	
	Closes the sub-menu and returns to the "Main Service Menu".
	Retourne au menu principal.
	Verlassen des Untermenüs
	Chiude il sottomenu e fa apparire il menu principale Field Service Mode.
	Cierra el submenú. El menú Field Service Mode aparece.
	Press < >: remote control; Vol. +/- : TV keyb.
V-Blanking	
Press < > on the RCU or VOL+/VOL- on TV front panel.	
1. Select the standard 4:3 format and zoom mode 0.	
1. Sélectionner le mode zoom standard 4/3 pour tube 4/3	
1. Wählen Sie den Standard-Zoom 4:3 bei 4:3 Bildröhren.	
1. Selezionare il modo zoom standard 4/3 per tubo 4/3	
1. Selecciono el modo de zoom estándar 4/3 para tubo 4/3.	
2. Apply a test pattern signal to the TV with a single horizontal and vertical line on the screen.	
2. appliquer une MIRE de BARRE avec seulement une ligne blanche horizontale en milieu de l'écran	
2. Speisen Sie ein Testbild mit nur einem horizontalen Strich in der Bildmitte ein.	
2. Applicare un monoscopio con un'unica linea bianca orizzontale al centro dello schermo	
2. Aplique una plantilla de prueba con sólo una línea blanca horizontal en el centro de la pantalla.	
3. Select "Blanking On" line of the menu and ENBL/BLK the function, the bottom half of the screen will go black.	
3. Positionner dans le mode Service. Blanking On la moitié basse de l'écran devient noire	
3. Schalten Sie den Blanking-Mode ein. Die untere Hälfte des Bildschirms wird schwarz.	
3. Posizionarsi in modo Service Blanking on; la parte inferiore dello schermo diventa nera	
3. Pase al modo Service Blanking On. La mitad inferior de la pantalla se vuelve negra.	
4. Select the "V-Slope" line of the menu and adjust its value until the centre line of the pattern is just visible.	
4. Aligner "Vertical - Slope" pour que la ligne médiane soit à peine non visible	
4. Regeln Sie "V-Slope" so ein, daß die Mittellinie nahezu verschwindet.	
4. Allineare la "Vertical Slope" in modo che la linea centrale sia appena visibile	
4. Alinee "Vertical-Slope" para que la línea mediana sea casi invisible.	
5. Return to the "Blanking On" line of the menu and DISABLE (Un-tick) the function.	<input type="checkbox"/>
5. Revenir à Blanking On et mettre <input type="checkbox"/>	
5. Schalten Sie den Blanking-Mode wieder ein und <input type="checkbox"/>	
5. Ritornare a modo Blanking on e porre <input type="checkbox"/>	
5. Vuelva a "Blanking on" y poner <input type="checkbox"/>	
6. Switch the test pattern signal to the crosshatch geometry pattern.	
6. Positionner la mire de quadrillage	
6. Speisen Sie ein Gittertestbild ein.	
6. Posizionare il monoscopio	
6. Coloque la plantilla cuadriculada.	
7. Perform the geometry adjustments described below.	
7. Effectuer les réglages de géométrie d'écris ci- dessous	
7. Nehmen Sie die Geometrie-einstellung wie unten beschrieben vor:	
7. Effettuare le regolazioni di geometria descritte in precedenza	
7. Efectúe los ajustes geométricos descritos más abajo.	
8. Store /Memoriser /Speichern /Memorizzare /Almacene	

GEOMETRY		
9.Adjust position H.		
9.Regler la position H		
9.Korrigieren Sie Horizontale Lage.		
9.Regolare la posizione H		
9.Ajuste la posición H		
10.Ajuster l'amplitude H		
10.Adjust amplitude H.		
10.Korrigieren Sie Horizontal-Amplitude		
10.Regolare l'ampiezza H		
10.Ajuste la amplitud H		
11-12. Correction of EW pincushion distortion.		
11-12. Correction de coussin EW		
11-12. Korrektur der Ost/West Kissenverzerrung.		
11-12. Correzione della distorsione a cuscino EW.		
11-12. Corrección de la distorsión de cojín EW.		
13. Correction of corners (Shape).		
13. Correction de coins (Shape)		
13. Korrektur der Ecken.		
13. Correzione degli angoli (Forma)		
13. Corrección de esquinas (Shape)		
14. Trapeze. / Trapèze		
14. Trapez-Verzerrung.		
14. Trapecio / Trapecio		
"These adjustments are not necessary for 4:3 tubes in 16:9 mode"		
"Pour les tubes 4/3 en mode 16/9, ces réglages ne sont pas nécessaires"		
"Diese Einstellungen sind nicht für 4:3 Bildröhren im 16:9 Betrieb erforderlich."		
"Queste regolazioni non sono necessarie per tubi 4/3 in modo 16/9"		
"Estos ajustes no son necesarios para los tubos 4/3 en modo 16/9"		
V-Amplitude V-Position		
H-Position		
S-Correction		
H-Amplitude		
EW - Amplitude		
EW - Trapezium		
EW - Shape		



→ After setting → Store (+) ☒

VIDEO	PAL																						
Return Closes the sub-menu and returns to the "Main Service Menu". Press </> on the RCU or VOL+/VOL- on TV front panel. Retourne au menu principal. Verlassen des Untermenüs																							
Chiude il sottomenu e fa apparire il menu principale Field Service Mode. Cierra el submenú. El menú Field Service Mode aparece. Press </>: remote control; Vol. +/- : TV keyb.																							
Normalise User Settings																							
Recalls the factory settings for colour, brightness, contrast and sharpness and sets contrast expand to "low". <input checked="" type="checkbox"/> Factory settings recalled <input type="checkbox"/> User settings kept.																							
R-Cut off**	 <div>  +  +  = nom. Grey scale test pattern white =100% </div>																						
G-Cut off**	 <div>  <div>grey</div> </div>																						
R - Drive	 <div>  +  +  = nom. Grey scale test pattern white =100% </div>																						
G - Drive	 <div>  <div>white</div> </div>																						
B - Drive	 <div>  +  +  = nom. Grey scale test pattern white =100% </div>																						
Peak-White**	<div>  <div>  +  +  = nom. Grey scale test pattern white =100% </div> </div> <div> <div>CRT Pin 6,8,11</div> <div>Blue cathode</div> <div>Blue cathode</div> </div>																						
<table border="1"> <thead> <tr> <th>Tube Type</th><th>[init]</th></tr> </thead> <tbody> <tr> <td>A51EFS</td><td>420 (600max)</td></tr> <tr> <td>A59EHJ</td><td>380 (540max)</td></tr> <tr> <td>A59EGD</td><td>400 (470max)</td></tr> <tr> <td>A66EHJ</td><td>300 (430max)</td></tr> <tr> <td>A68EGD</td><td>350 (410max)</td></tr> </tbody> </table>	Tube Type	[init]	A51EFS	420 (600max)	A59EHJ	380 (540max)	A59EGD	400 (470max)	A66EHJ	300 (430max)	A68EGD	350 (410max)	<table border="1"> <thead> <tr> <th>Tube Type</th><th>[init]</th></tr> </thead> <tbody> <tr> <td>A80AEJ</td><td>240 (340max)</td></tr> <tr> <td>W56EGV</td><td>520 (610max)</td></tr> <tr> <td>W66EGV</td><td>480 (560max)</td></tr> <tr> <td>W76EGV</td><td>300 (350max)</td></tr> </tbody> </table>	Tube Type	[init]	A80AEJ	240 (340max)	W56EGV	520 (610max)	W66EGV	480 (560max)	W76EGV	300 (350max)
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Scal. Brightness	 <div>  +  = 50%  = 100% Grey scale test pattern white =100% </div> <div>  <div>black</div> </div>																						
Scal*. Colour	<div>  +  +  = nom. PAL (then SECAM +RGB) 75% Colour bar test pattern via RF. </div> <div>  </div> <div>  </div>																						
Scal. Contrast	factory settings.																						

<p>IF</p>	<p>AGC</p> <ul style="list-style-type: none"> - Minimum noise- Minimum de bruit - Minimum Rauschen- Rumore minimo - Minimo ruido
<p>FFi - Bit</p> <p>Fast filter (IF /PLL)</p> <p>Filtre rapide (FI /PLL)</p> <p>Schnelles filter (ZF/PLL)</p> <p>Filtro rapido (IF /PLL)</p> <p><input checked="" type="checkbox"/> Asia</p> <p><input type="checkbox"/> Europ</p>	

→ After setting → Store (+) ☒

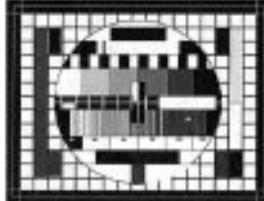
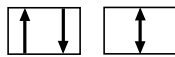


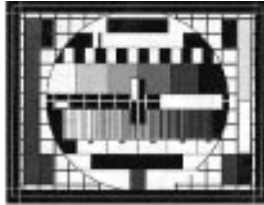

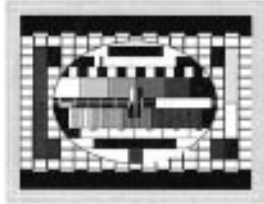

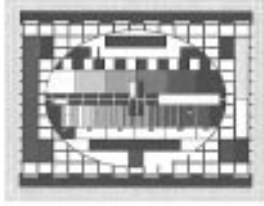

Note :

- * adjust separate for PAL/NTSC/SECAM and RGB/AV
- * After PEAK white adjustment control cut off setting. Repeat the adjustments if necessary.

Nach der Einstellung von "Peak white" die "Cut off"-Einstellungen wiederholen.

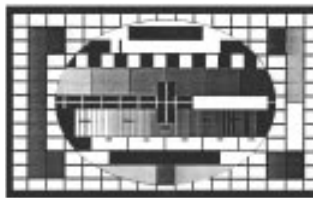







4/3 picture tube

Signal : 4/3 test pattern

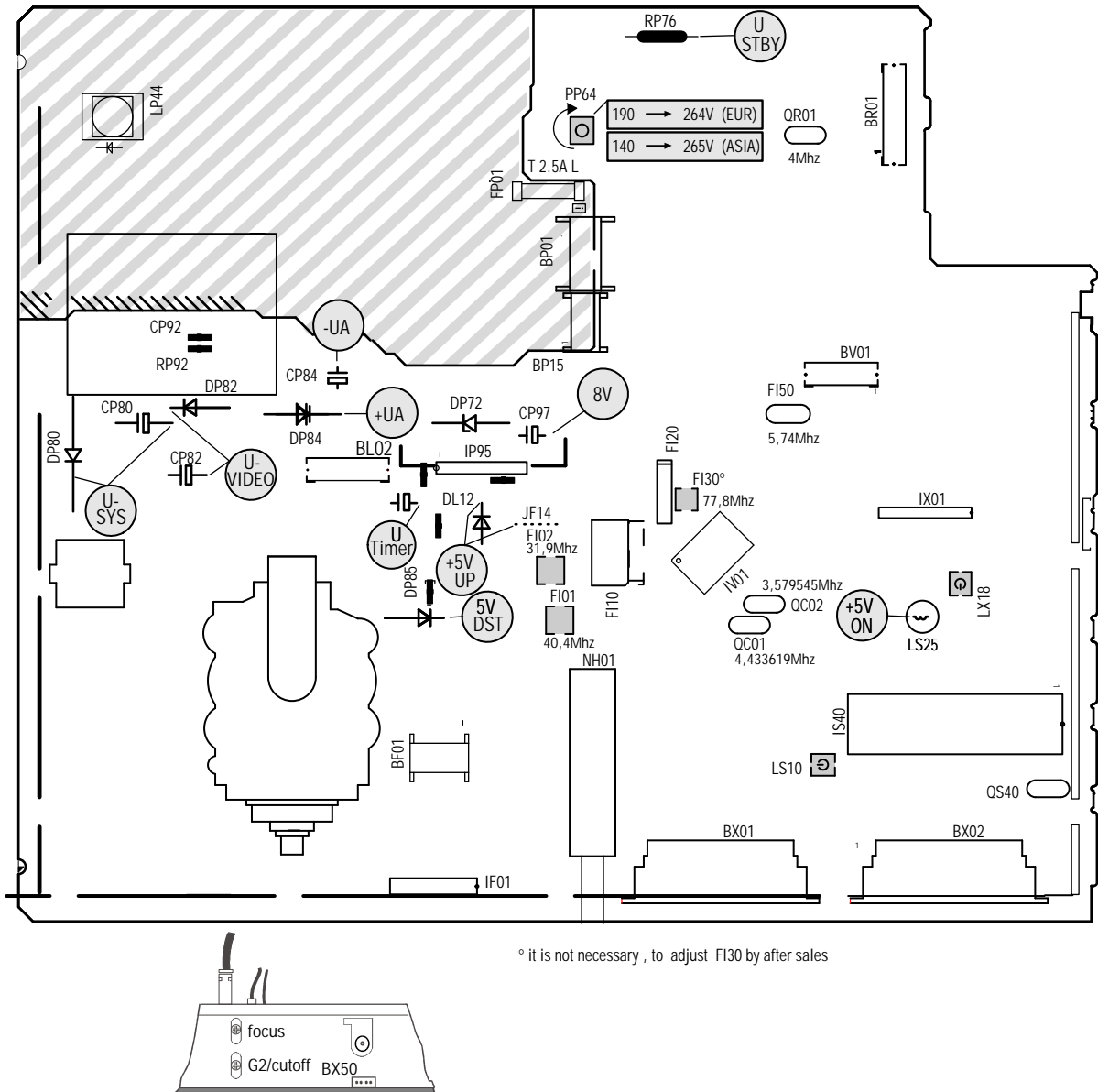
<p>4 / 3 standard mode zoom 0</p>		<p>overscan V=107% , H=107%</p> <p>1- Adjust Vertical position and Vertical amplitude 2- Adjust Vertical Blanking and linearity</p>  <p>3- Adjust Horizontal position and Horizontal amplitude</p>  <p>4-Adjust EW Amplitude ,EW Shape and Trapezium</p> 
<p><4/3> zoom 1</p>		<p>overscan V=120% , H=120%</p> 
<p>16 / 9 standard mode zoom 0</p>		<p>Adjust the vertical height until V = 80%</p> 
<p><16 / 9> zoom 1</p>		<p>Adjust the vertical height : V =90%</p> 

16/9 picture tube


Signal : 4/3 test pattern


<p>16 / 9 standard mode zoom 0</p>		<p>overscan V=107%, H =107%</p> <ol style="list-style-type: none"> 1- Adjust Vertical position and Vertical amplitude 2- Adjust Vertical Blanking and linearity <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <ol style="list-style-type: none"> 3- Adjust Horizontal position and Horizontal amplitude <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <ol style="list-style-type: none"> 4-Adjust EW Amplitude ,EW Shape and Trapezium <div style="display: flex; justify-content: space-around; align-items: center;">    </div>
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**LOCATION OF CONTROLS - EMPLACEMENT DES REGLAGES -
SERVICE LAGEPLAN - POSIZIONE REGOLATORI DI SERVIZIO -
SITUACIÓN DE LOS AJUSTES**



° it is not necessary , to adjust FI30 by after sales

 Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello chassis collegata alla rete.
Parte del chassiss conectada a la red.

 Use isolating mains transformer -
Utiliser un transformateur isolateur du secteur -
Trenntrafo verwenden -
Utilizar un transformador aislador de red -
Utilizzare un trasformatore per isolarvi dalla rete

ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONI - AJUSTES

U Sys	PP 64			<table border="1"> <thead> <tr> <th>Tube</th><th>Format</th><th>Usys</th><th>Jumper</th><th>RL65</th></tr> </thead> <tbody> <tr> <td>A51EFS83X191</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A59EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr> <td>A66EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr> <td>A59EGD048X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A68EGD038X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A68AGA25X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A80AEJ15X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>W56EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr> <td>W66EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr> <td>W76EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> </tbody> </table>	Tube	Format	Usys	Jumper	RL65	A51EFS83X191	4:3	126V+/-0,5V	JL80	4k7	A59EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A66EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A59EGD048X30	4:3	126V+/-0,5V	JL80	4k7	A68EGD038X30	4:3	126V+/-0,5V	JL80	4k7	A68AGA25X01	4:3	126V+/-0,5V	JL80	4k7	A80AEJ15X01	4:3	126V+/-0,5V	JL80	4k7	W56EGV023X015	16:9	138V+/-0,5V	JL82	47k	W66EGV023X015	16:9	138V+/-0,5V	JL82	47k	W76EGV023X015	16:9	138V+/-0,5V	JL82	47k
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IF Alignment Alignement FI	trap 40,4Mhz FI 01	Switch set to standard BG Commuter le TV au standard BG IF Signal 40,4MHz (BG) 31,9MHz (BG)		Adjust FI01 for minimum value at 40,4Mhz																																																							
	trap 31,9Mhz FI 02	50 mV 		Adjust FI20 for minimum value at 31,9Mhz																																																							
U G2 / cutoff	SCREEN	 AV (no Signal, black screen)	CRT IB01: pins 9 / 12 / 15 highest output																																																								
FOCUS	FOCUS LL05	Test pattern (standard values)		Sharp picture																																																							

I - ENTER/EXIT SERVICE MODE - ENTREE/SORTIE DU MODE SERVICE

1 ACCESSING THE SERVICE MODE

TV Control Panel Access

- Switch the TV into **"Standby"** mode by pressing the Standby button on the RCU.
- Switch **"OFF"** the mains supply to the TV and wait for the LED to extinguish.
- Whilst holding depressed the **PR** - and **VOL**- (8s), switch **"ON"** the mains supply to the TV.
- Once initialised, the **Main Service Menu** will appear on the screen of the TV.

Soft-Ver. V1.00-0 0080
 Config. A5- - -N
 Serial-No. 103465071

► QUIT
 TUBE
 SETUP
 GEOMETRY
 VIDEO
 IF

Please Note:

In the service mode :

- The **CHILD LOCK** function is re-initialised. The **LOCK** function (PIN number) is ignored.
- All Wake-up/Sleep timer settings are **CLEARED**.
- SCART socket pin 8 switching voltages are ignored.
- AV-Link, WSS Detection, EPG and TELETEXT functions are disabled.
- Automatic standby mode switching functions (no signal conditions) are disabled.
- Brightness, Colour and Contrast are set to factory defaults.
- Sharpness settings are set to MID position.
- Contrast Expand is set to LOW.
- Automatic **INSTALL** mode is disabled.
- FORMAT** and **ZOOM** are reset to factory defaults.

2 TEMPORARY EXIT FROM SERVICE MODE

- Press the **"EXIT"** button on the RCU.
- Pressing the **"MENU"** button on the RCU will activate the customer menus.

- The Service Menu can be re-entered by pressing the **"BLUE"** button on the RCU.

3 EXITING FROM SERVICE MODE

Remote Control

TV Control Panel

ON/OFF key or "Stand-by" buttons

- Select the **"QUIT"** line of the **"Main Service Menu"**.

- Press **"<"**, **"OK"** or **">"** button

- Press **"VOL.+"** button

- TV mode.

Values or adjustment not **"STORED"** before exiting the service mode will **NOT** be **"SAVED"** in the NVM.

1 ACCES AU MODE SERVICE

Accès avec le clavier du téléviseur

- Commuter le téléviseur en position de veille avec la télécommande. Eteindre le téléviseur par l'interrupteur secteur (attendre l'extinction complète du voyant).
- Tout en appuyant sur les touches **PR** - et **VOL** - , mettre le TV en service à l'aide de la touche **M/A**.
- Maintenir enfoncées les touches **PR** - et **VOL** - . (8s)
Le menu suivant apparaît.

Soft-Ver. V1.00-0 0080
 Config. A5- - -N
 Serial-No. 103465071

► QUIT
 TUBE
 SETUP
 GEOMETRY
 VIDEO
 IF

Note :

En mode service:

- Le verrouillage parental est effacé (réinitialisé).
- La fonction de verrouillage (Pin number) est ignorée.
- La programmation des heures «reveille/matin» est annulée.
- Possibilité de passer en mode service avec commutation lente active.
- AV- Link , la détection WSS, l'EPG et le Vidéotexte ne sont pas validés.
- La fonction de stand-by automatique en cas d'absence de signal d'antenne n'est pas validée.
- Les valeurs de réglages usine sont affectées au contraste, à la couleur et à la lumière.
- Le contour est appelé à sa valeur moyenne.
- L'expansion contraste est au niveau bas.
- Le mode «Light sensor» n'est pas valides.
- Zoom et format ignorées.

2 SORTIE TEMPORAIRE DU MODE SERVICE

- Utiliser la touche Exit de la télécommande.
- Le menu utilisateur peut être accessible via la touche «Menu».

- Pour entrer à nouveau dans le mode service utiliser la touche bleue.

3 SORTIE DEFINITIVE DU MODE SERVICE

télécommande

clavier du téléviseur

Inter M/A ou Stand-by

- Aller au point **"QUIT"** dans le menu principal du mode service.

- Appuyer sur **"<"**, **"OK"** ou **">"**

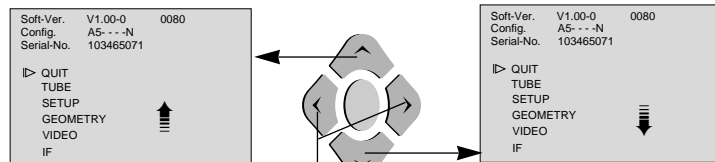
- Appuyer sur **"VOL.+"**

- Mode TV.

Les valeurs ou réglages non mémorisées avant la sortie ne seront pas écrites en NVM.

II - NAVIGATION INSIDE THE SERVICE MODE - DEPLACEMENT DANS LE MODE SERVICE FUNCTIONS WALLIN SERVICE MODE - OPZIONI NEL SERVICE MODE - BUSQUEDA EN MODO SERVICIO

1 REMOTE CONTROL - TELECOMMANDE - FERNBEDIENUNG TELECOMANDO - MANDO A DISTANCIA

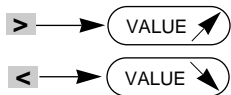


Naviagation up

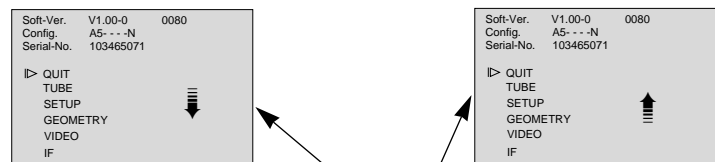
Naviagation down

- Select option
- Option anwählen
- Selezionare l'opzione
- Seleccionar opción

- "Change" value
- Wert "ändern"
- "Cambiare" valore
- "Cambiar" valor



2 TV CONTROL PANEL - CLAVIER TV - TASTATUR DES FERNSEHGERÄTS - COMANDI DEL TELEVISORE -

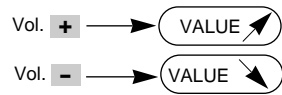


Naviagation down

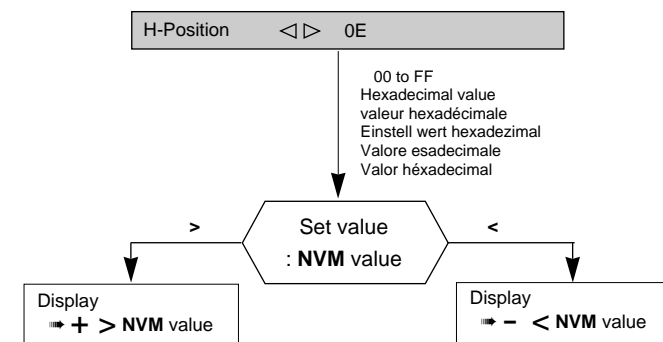
Naviagation up

- Select option
- Option anwählen
- Selezionare l'opzione
- Seleccionar opción

- "Change" value
- Wert "ändern"
- "Cambiare" valore
- "Cambiar" valor

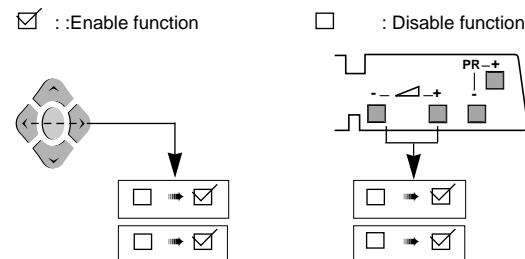


3 DISPLAYING THE VALUE OF THE SETTING - AFFICHAGE DES VALEURS - ANZEIGE DES EINSTELL WERTS VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - VISUALIZACION DEL VALOR DE AJUSTE



4 TOGGLE FUNCTIONS - VALIDATION DES FONCTIONS EIN-UND AUSSCHALT FUNKTIONEN - FUNZIONI DI COMMUTAZIONE - FUNCION CONMUTACION

To enable a function check (tick) ☒ the box.
Pour valider une fonction cocher ☒ la case correspondante
Zum Implementieren einer Funktion das Kontrollkästchen ☒ aktivieren (ankreuzen)
Per implementare una funzione di verifica, (vistare) ☒ la casella
Para poner en fucionamiento una función verifique (señale) ☒ la casilla



5 STORING VALUES IN MEMORY - MEMORISATION DES VALEURS - SPEICHERN DER WERTE - MEMORIZZAEZ I VALORI - VALORES ALMACENADOS EN LA MEMORIA

After setting, the values are stored in NVM.
Après réglages les valeurs sont mémorisées en NVM.
Nach dem Einstellen werden die Werte im NVM gespeichert.
Dopo la regolazione i valori vengono memorizzati in NVM.
Después del ajuste, los valores son almacenados en NVM

The box ☐ becomes ☒
During alignment, values are temporarily stored in RAM.
En cours d'alignement les valeurs sont mémorisées temporairement en RAM
Während des Abgleichs werden die Werte vorübergehend im RAM gespeichert
Durante l'allineamento i valori vengono memorizzati provvisoriamente sulla RAM
Durante el ajuste, los valores son almacenados temporalmente en RAM

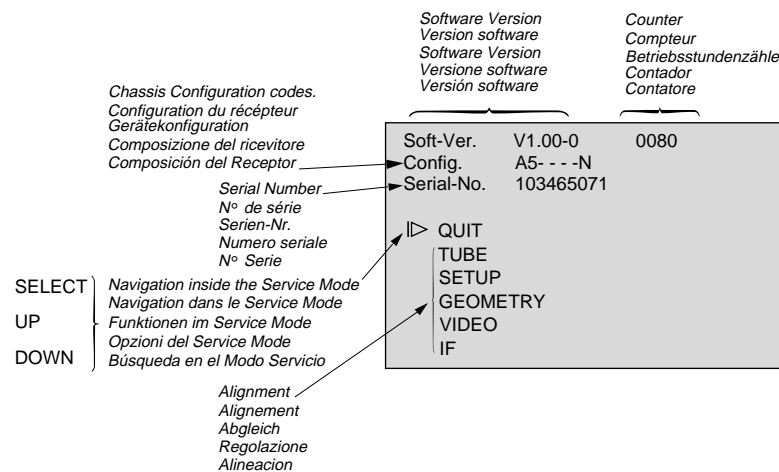
Store Copies RAM values into NVM
Copie la valeur RAM en NVM
Kopieren des Werts von RAM nach NVM
Copiare i valori RAM in NVM
Copiar valores RAM en NVM

Restore Copies all values from NVM into RAM.
Copie toutes les valeurs des données NVM en RAM
Kopiert alle NVM-Datenwerte in den RAM
Copiare tutti i valori da NVM sulla RAM
Copia todos los valores de NVM a RAM

ROM Default All the default values of a page in use are stored in RAM.
L'ensemble des valeurs par défaut d'une page courante est chargé en RAM.
Sämtliche Standardwerte der aktuellen Seite werden im RAM geladen
Tutti i valori di default di una pagina in uso vengono memorizzati sulla RAM
Todos los valores por defecto de la página en curso están almacenados en RAM.

III - LITE-MENU FOR FIELD SERVICE MODE - MENUS DU MODE SERVICE

1 MAIN MENU - MENU PRINCIPAL



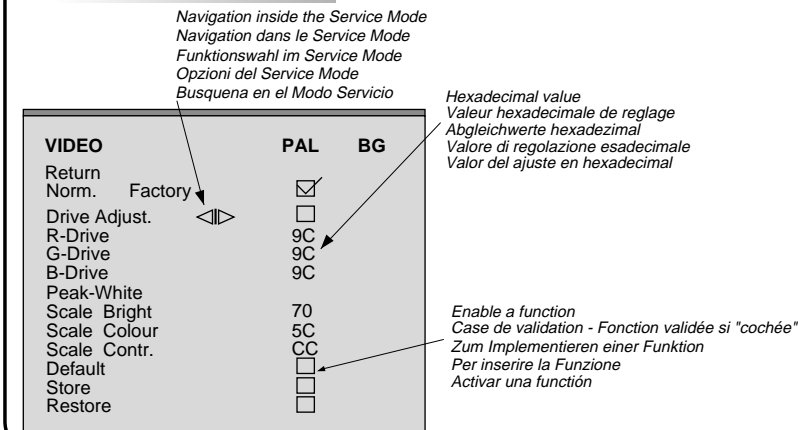
TV CONFIGURATION - CONFIGURATION DU TV - GERÄTEKONFIGURATION - CONFIGURAZIONE DEL TV - CONFIGURACIÓN DEL TV

Config.	A1Z-DKC
Character 1 : Tube type : «A» = 4/3 , «W» =16/9 Character 2 : Chassis type : «5» = 50Hz, Character 3 : Zoom available : «Z»=yes, «-»=not Character 4 : Ambient Sensor : «S»= detected, «-»= not Character 5 : Dolby : «D»=detected, «-»= not Character 6 : AV Link detected : «K»=IR link detected, «-»= not Character 7 : Chassis Variant: «N»= Nicam, «S»=Stereo	
Serial-N0.	A16-----
Character 1 : Factory : «A»= Angers , «C» =Celle, «T» =Tarancon Character 2 : Year : «G» = 1996, «H»= 1997 etc.. Character 3 : Month, from : «1»=January to «C»=December Character 4-9 : Serial N0.	

TIME COUNTER - COMPTEUR DE TEMPS - BETRIEBSSTUNDENZÄHLER - CONTATORE - CONTADOR

The counter indicates the TV's number of service hours.It counts from 0 to 65535 hours.
The display is hexadecimal.
Le compteur de temps indique le nombre d'heures de service du TV. Il compte de 0 à 65535 heures. L'affichage est en hexadécimal.
Der Zähler zeigt an, wieviele Stunden der Fernseher in Betrieb ist. Die Anzeige ist hexadezimal.
Il contatore indica il numero di ore di servizio del TV. Puo' contatore da 0 a 65535. La visualizzazione è esadecimale.
El contador indica el número de horas de servicio de la TV. Cuenta de 0 a 65535 horas. El visualizador es hexadecimal.

2 SUBMENU - SOUS-MENU



ALIGNMENT PROCEDURE - PROCESSUS DE REGLAGES - ABGLEICH - VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - PROCEDIMIENTO DE ALINEACION

TUBE

Return

Tube type

Store

Restore

A66ECY...

<I>

☒

☐

SETUP

Return

Clear

Progs.

I>

Kbd.

Config.

Default

WSS

Default

Store

Restore

☐

☐

☐

☐

GEOMETRY

Return

V- Slope

V-Amplitude

V-Position

Blanking On

S - Correction

H-Position

H-Amplitude

EW-Amplitude

EW-Trapezium

Default

Store

Restore

7C

6C

7C

☐

54

94

70

78

98

☐

☐

☐

VIDEO

Return

Norm.

Factory

Drive Adjust.

R-Drive

G-Drive

B-Drive

Peak-White

Scale Bright

Scale Colour

Scale Contr.

Default

Store

Restore

☒

☐

9C

9C

9C

70

5C

CC

☐

☐

☐

IF

Return

AGC Take Over

FFI - Bit

Default

Store

Restore

<I>

88

☐

☒

☒

☒

TUBE

Return

Closes the sub-menu and returns to the "Main Service Menu". Press </> on the RCU or VOL+/VOL- on TV front panel.

Retourne au menu principal.

Verlassen des Untermenüs, das Hauptmenü des service Modes erscheint

Chiude il sottomenu e fa apparire il menu principale Field Service Mode.

Cierra el submenú. El menú Field Service Mode aparece.

Press </>: remote control; Vol. +/- : TV keyb.

Tube type

After replacing the NVM, the correct tube type number must be entered (6 characters). Once entered, the tubes geometry and video default vales are immediately activated. Variable geometry and video parameters are written to the NVM when the "STORE" line is selected. See table below for tube type numbers.

Definit le tube exact après changement de NVM. Les nouvelles valeurs de tubes (avec video et géométrie) sont actives de suite. Les paramètres de vidéo et de géométrie sont chargés en NVM lorsque STORE est sélectionné. Voir liste ci-dessous.

Nach Tausch des NVM den bildröhrentyp (6 Ziffern) auswählen. Die neuen Geometrie-und Video-defaultwerte werden sofort aktiv. Variable Geometrie- und Videowerte werden durch Speichern mit "STORE" ins NVM geschrieben. Bildrohrauflistung : siehe unten.

Scegliere il tubo appropriato dopo aver sostituito la NVM; i 6 caratteri che indicano il nuovo tipo di tubo, richiamano i valori video e geometria di default. I parametri per video e geometria vengono caricati nella NVM

SETUP

Return

Closes the sub-menu and returns to the "Main Service Menu".

Retourne au menu principal.

Verlassen des Untermenüs

Chiude il sottomenu e fa apparire il menu principale Field Service Mode.

Cierra el submenú. El menú Field Service Mode aparece.

Press </>: remote control; Vol. +/- : TV keyb.

Clear Prog.

Cleares all programmes STORED in memory and RESETS all PICTURE and SOUND settings to the factory default values. The AUTO INSTALL (out of factory) mode can be initialised by a long press (> 5sec.) of the selection button.

Efface tous les programmes mémorisés. valeurs SON et IMAGES: valeurs usines. Pour sortir des valeurs usine : Selection : Long press:2,5s

Löscht alle Programme und ersetzt alle Ton-und Bildeinstellungen durch Fabrikwerte. Nach erneutem Einschalten erscheint das Installationsmenü. Anwahl: 2,5s drücken

Clear Prog.

Cancella tutti i programmi in memoria.I Valori analogici SUONO E IMMAGINE vengono riportati a livello di default. Per ristabilire le condizioni di uscita fabbrica, selezionare la funzione e premere per 2,5sec

Programa de borrado. Borra todos los programas almacenados en la memoria.Valores analógicos de SOUND PICTURE: valores de fábrica.Regreso a la TV para "salir del modo fábrica". Selección: Presión larga igual a 2,5 s.

☒ active-aktiv ☐ No active-inaktiv

Kbd. Config

Factory adjusted

Reserve au reglage usine

Reserviert für fabrikinstellungen

Riservato alla regolazione di fabbrica

Kbd. Config

<I>

Default

WSS

Automatic detection of DOLBY surround sound and 16/9 Format pictures via Teletext line number 23 is valid on all programmes.

Sélection du process WSS valid pour tous programmes

WSS (nur bei 16:9 oder Dolby) Auswertung der Zeile 23 zur automatischen Format umschaltung und Dolby umschaltung

Identificazione "auto-surround" e "format" tramite il televideo, decodificando la riga 23. La selezione di WSS è valida per tutti i programmi.

Detección "auto-surround" y "format" a través de la línea 23 de Teletext.La selección del procesamiento WSS es válida para todos los programas.

☒ detect.enable- aktiv ☐ disable-inaktiv

GEOMETRY

Return

Closes the sub-menu and returns to the "Main Service Menu".

Retourne au menu principal.

Verlassen des Untermenüs

Chiude il sottomenu e fa apparire il menu principale Field Service Mode.

Cierra el submenú. El menú Field Service Mode aparece.

Press </>: remote control; Vol. +/- : TV keyb.

V-Blanking

Press </> on the RCU or VOL+/VOL- on TV front panel.

1.Select the standard 4:3 format and zoom mode 0.

1.Sélectionner le mode zoom standard 4/3 pour tube 4/3

1.Wählen Sie den Standard-Zoom 4:3 bei 4:3 Bildröhren.

1.Selezionare il modo zoom standard 4/3 per tubo 4/3

1.Seleccione el modo de zoom estándar 4/3 para tubo 4/3.

2.Apply a test pattern signal to the TV with a single horizontal and vertical line on the screen.

2.appliquer une MIRE de BARRE avec seulement une ligne blanche horizontale en milieu de l'ecran

2.Speisen Sie ein Testbild mit nur einem horizontalen Strich in der Bildmitte ein.

2.Applicare un monoscopio con un'unica linea bianca orizzontale al centro dello schermo

2.Aplique una plantilla de prueba con sólo una línea blanca horizontal en el centro de la pantalla.

3.Select "Blanking On" line of the menu and ENABLE (tick) the function, the bottom half of the screen will go black.

3.Positinner dans le mode Service Blanking On la moitié basse de l' ecran devient noire

3.Schalten Sie den Blanking-Mode ein. Die untere Hälfte des Bildschirms wird schwarz.

3.Posizionarsi in modo Service Blanking on; la parte inferiore dello schermo diventa nera

3.Pase al modo Service Blanking On. La mitad inferior de la pantalla se vuelve negra.

4.Select the "V_Slope" line of the menu and adjust its value until the centre line of the pattern is just invisible.

4.Aligner "Vertical - Slope" pour que la ligne mediane soit a peine non visible

4.Regeln Sie "V_Slope" so ein, daß die Mittellinie nahezu verschwindet.

4.Alineare la "Vertical Slope" in modo che la linea centrale sia appena visibile.

4.Alinee "Vertical-Slope" para que la línea mediana sea casi invisible.

5.Return to the "Blanking On" line of the menu and DISABLE (un-tick) the function. ☐

5.Revenir à Blanking On et mette ☐

5.Schalten Sie den Blanking-Mode wieder ein und ☐

5.Ritornare in modo Blanking on e porre ☐

5.Vuelva a "Blanking on" y poner ☐

6.Switch the test pattern signal to the crosshatch geometry pattern.

6.Positioner la mire de quadrillage

6.Speisen Sie ein Gittertestbild ein.

6.Posizionare il monoscopio

6.Coloque la plantilla cuadriculada.

7.Perform the geometry adjustments described below.

7.Effectuer les réglages de geometrie d'écrits ci- dessous

7.Nehmen Sie die Geometrieeinstellung wie unten beschrieben vor:

7.Effettuare le regolazioni di geometria descritte in precedenza

7.Efectúe los ajustes geométricos descritos más abajo.

8.Store /Memoriser /Speichern /Memorizzare /Almacene

VIDEO

Return

Factory

Drive Adjust.

R-Drive

G-Drive

B-Drive

Peak-White

Scale Bright

Scale Colour

Scale Contr.

Default

Store

Restore

<I>

9C

9C

9C

70

5C

CC

☐

☐

☐

PAL

Return

Regler la position H

Korrigieren Sie Horizontale Lage.

Regolare la posizione H

Ajuste la posición H

Ajuster l'amplitude H

Adjust amplitude H.

Korrigieren Sie Horizontal-Amplitude

10 Regolare l'ampiezza H

Ajuste la amplitud H

11-12.Correcton of EW pincushion distortion.

11-12.Correction de coussin EW

11-12.Korrektur der Ost/West Kissenverzerrung.

11-12.Correzione della distorsione a cuscino EW

11-12.Corrección de la distorsión de cojin EW.

13.Correction of corners (Shape).

13.Correction de coins (Shape)

13.Korrektur der Ecken.

13.Correzione degli angoli (Forma)

13.Corrección de esquinas (Shape)

14.Trapeze. / Trapèze

14 Trapez-Verzerrung.

14.Trapezio / Trapecio

"These adjustments are not necessary for 4:3 tubes in 16:9 mode"

"Pour les tubes 4/3 en mode 16/9, ces réglages ne sont pas necessaire"

"Diese Einstellungen sind nicht für 4:3 Bildröhren im 16:9 Betrieb erforderlich."

"Queste regolazioni non sono necessarie per tubi 4/3 in modo 16/9"

"Estos ajustes no son necesarios para los tubos 4/3 en modo 16/9"

BG

Return

Regler la position H

Korrigieren Sie Horizontale Lage.

Regolare la posizione H

Ajuste la posición H

Ajuster l'amplitude H

Adjust amplitude H.

Korrigieren Sie Horizontal-Amplitude

10 Regolare l'ampiezza H

Ajuste la amplitud H

11-12.Correcton of EW pincushion distortion.

11-12.Correction de coussin EW

11-12.Korrektur der Ost/West Kissenverzerrung.

11-12.Correzione della distorsione a cuscino EW

11-12.Corrección de la distorsión de cojin EW.

13.Correction of corners (Shape).

13.Correction de coins (Shape)

13.Korrektur der Ecken.

13.Correzione degli angoli (Forma)

13.Corrección de esquinas (Shape)

14.Trapeze. / Trapèze

14 Trapez-Verzerrung.

14.Trapezio / Trapecio

"These adjustments are not necessary for 4:3 tubes in 16:9 mode"

"Pour les tubes 4/3 en mode 16/9, ces réglages ne sont pas necessaire"

"Diese Einstellungen sind nicht für 4:3 Bildröhren im 16:9 Betrieb erforderlich."

"Queste regolazioni non sono necessarie per tubi 4/3 in modo 16/9"

"Estos ajustes no son necesarios para los tubos 4/3 en modo 16/9"

Normalise User Settings

Recalls the factory settings for colour, brightness, contrast and sharpness and sets contrast expand to "low".

☒ Factory settings recalled

☐ User settings kept.

R-Cut off*

☀+☉+☾=nom.

Grey scale test pattern white =100%

G-Cut off*

☀+☉+☾=nom.

Grey scale test pattern white =100%

R - Drive

☀+☉+☾=nom.

Grey scale test pattern white =100%

G - Drive

☀+☉+☾=nom.

Grey scale test pattern white =100%

B - Drive

☀+☉+☾=nom.

Grey scale test pattern white =100%

Peak-White**

☀+☉+☾=nom.

Peek white test pattern white =100%

CRT Pin 6,8,11

Blue cathode

Blue cathode

Tube Type	[init]	Tube Type	[init]
A51EFS	420 (600max)	A80AEJ	240 (340max)
A59EHJ	380 (540max)	W56EGV	520 (610max)
A59EGD	400 (470max)	W66EGV	480 (560max)
A66EHJ	300 (430max)	W76EGV	300 (350max)
A68EGD	350 (410max)		

Scal. Brightness

☀+☉= 50%

☾= 100%

Grey scale test pattern white =100%

black

Scal*. Colour

☀+☉+☾=nom.

PAL (then SECAM +RGB)

75% Colour bar test pattern via RF.

Blue Cathode

CRT

F-H

Scal. Contrast

factory settings.

GEOMETRY MODE ALIGNMENT

4/3 picture tube

Signal : 4/3 test pattern

4 / 3 standard mode zoom 0

overscan V=107% , H=107%
1- Adjust Vertical position and Vertical amplitude
2- Adjust Vertical Blanking and linearity

3- Adjust Horizontal position and Horizontal amplitude

4-Adjust EW Amplitude ,EW Shape and Trapezium

<4/3> zoom 1

overscan V=120% , H=120%

16 / 9 standard mode zoom 0

Adjust the vertical height until V = 80%

<16 / 9> zoom 1

Adjust the vertical height : V =90%

16/9 picture tube

Signal : 4/3 test pattern

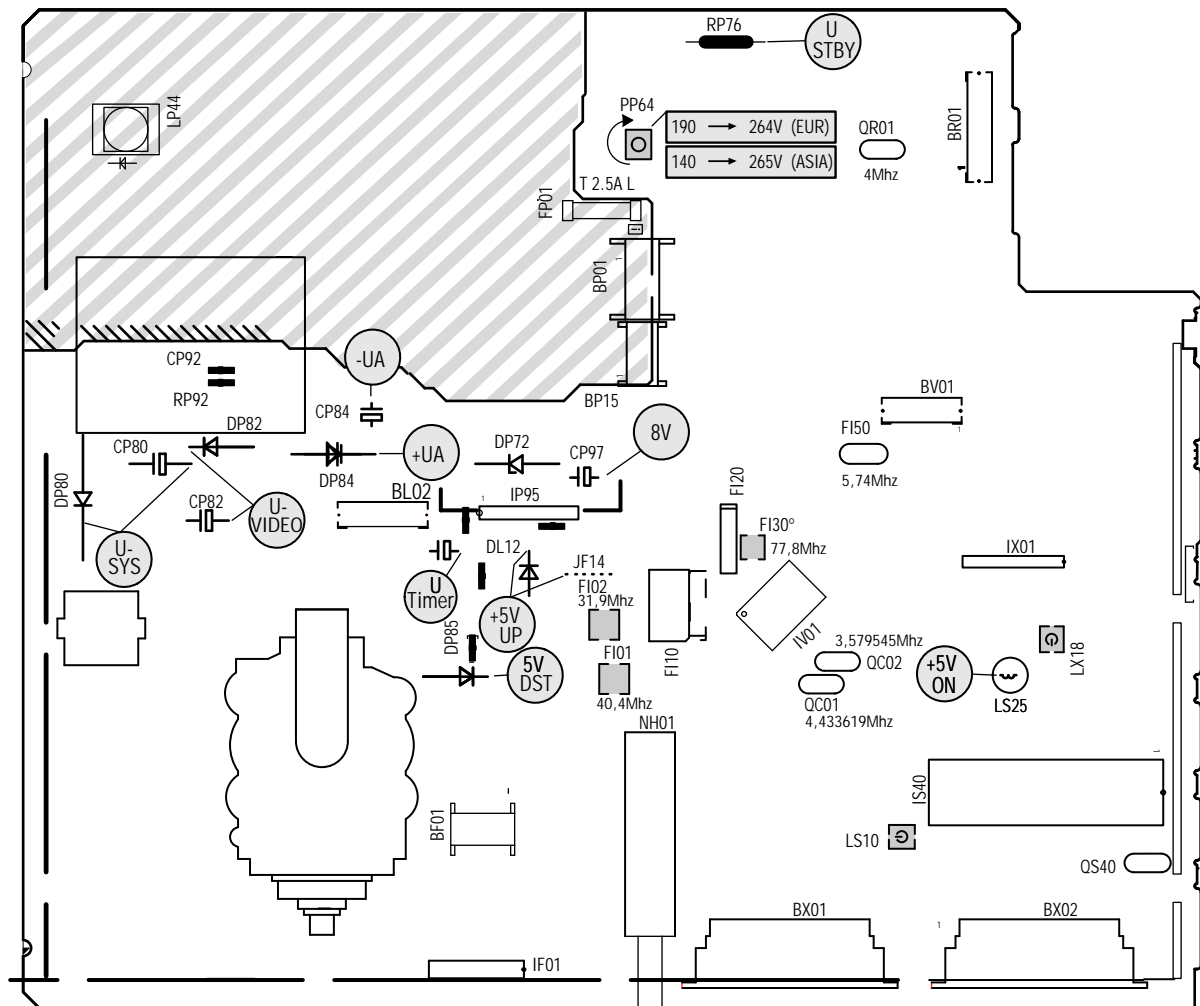
16 / 9 standard mode zoom 0

overscan V=107%, H =107%
1- Adjust Vertical position and Vertical amplitude
2- Adjust Vertical Blanking and linearity

3- Adjust Horizontal position and Horizontal amplitude

4-Adjust EW Amplitude ,EW Shape and Trapezium

LOCATION OF CONTROLS - EMBLACEMENT DES REGLAGES - SERVICE LAGEPLAN - POSIZIONE REGOLATORI DI SERVIZIO - SITUACIÓN DE LOS AJUSTES



° it is not necessary, to adjust F130 by after sales



Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello chassis collegata alla rete.
Parte del chassis conectada a la red.



Use isolating mains transformer -
Utiliser un transformateur isolateur du secteur -
Trenntrafo verwenden -
Utilizar un transformador aislador de red -
Utilizzare un trasformatore per isolarvi dalla rete

ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONI - AJUSTES

U Sys	PP 64			<table border="1"> <thead> <tr> <th>Tube</th><th>Format</th><th>Usys</th><th>Jumper</th><th>RL65</th></tr> </thead> <tbody> <tr> <td>A51EFS83X191</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A59EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr> <td>A66EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr> <td>A59EGD048X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A68EGD038X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A68AGA25X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A80AEJ15X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>W56EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr> <td>W66EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr> <td>W76EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> </tbody> </table>	Tube	Format	Usys	Jumper	RL65	A51EFS83X191	4:3	126V+/-0,5V	JL80	4k7	A59EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A66EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A59EGD048X30	4:3	126V+/-0,5V	JL80	4k7	A68EGD038X30	4:3	126V+/-0,5V	JL80	4k7	A68AGA25X01	4:3	126V+/-0,5V	JL80	4k7	A80AEJ15X01	4:3	126V+/-0,5V	JL80	4k7	W56EGV023X015	16:9	138V+/-0,5V	JL82	47k	W66EGV023X015	16:9	138V+/-0,5V	JL82	47k	W76EGV023X015	16:9	138V+/-0,5V	JL82	47k
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IF Alignment Alignement FI	trap 40,4Mhz FI 01	Switch set to standard BG Commuter le TV au standard BG IF Signal 40,4MHz (BG) 31,9MHz (BG)		Adjust FI01 for minimum value at 40,4Mhz																																																							
	trap 31,9Mhz FI 02	50 mV 		Adjust FI20 for minimum value at 31,9Mhz																																																							
U G2 / cutoff	SCREEN	 AV (no Signal, black screen)	CRT IB01: pins 9 / 12 / 15 highest output																																																								
FOCUS	FOCUS LL05	Test pattern (standard values)		Sharp picture																																																							

I - EIN-AUSTIEG SERVICE MODE - ACCESSO/USCITA ALLA/DALLA FUNZIONE

I EINSTIEG IN DEN SERVICE MODE

Zugriff über die Tastatur des Fernsehgeräts

- Mit der Fernbedienung das Fernsehgerät in Stand-by schalten. Das Gerät mit dem Netzschalter ausschalten (warten bis LED dunkel ist)
- Gleichzeitig die Tasten **PR-** und **VOL-** drücken und den TV über die EIN/AUS-Taste einschalten.
- Die Tasten **PR-** und **VOL-** (8s) gedrückt halten.

Soft-Ver. V1.00-0 0080
 Config. A5- - - N
 Serial-No. 103465071

► QUIT
 TUBE
 SETUP
 GEOMETRY
 VIDEO
 IF

Anmerkung :

Im SERVICE MODE :

- wird die Sperrfunktion (PIN-Nummer) ignoriert und die Kindersicherung gelöscht (reinitialisiert).
- werden alle Ein- und Ausschaltzeitgeber gelöscht.
- wird die SCART - Schaltspannung ignoriert.
- werden AV- Link WSS, EPG und Teletext gesperrt
- wird die automatische Abschaltung bei fehlendem Antennensignal gesperrt.
- werden Kontrast, Farbe und Helligkeit auf Standardwerte gesetzt.
- wird die Bildschärfe auf Mittelstellung (nominal) gesetzt.
- wird der Kontrast-Expander auf "gering.." gesetzt.
- wird das Standardformat bzw. der Standard-Zoom modus gewählt.

I ACCESSO AL SERVICE MODE

tramite i comandi del televisore

- Commutare il televisore in stand-by con il telecomando. Spegner l'apparecchio con l'interruttore di rete (attendere finché il LED è spento)
- Tenere premuti i tasti **PR- e VOL-** accendendo il TV con il pulsante ON/OFF.
- Premere i pulsanti **PR - e VOL-** (8s).

Soft-Ver. V1.00-0 0080
 Config. A5- - - N
 Serial-No. 103465071

► QUIT
 TUBE
 SETUP
 GEOMETRY
 VIDEO
 IF

Nota :

Nel service mode:

- la funzione Blocco (Numero Pin) viene ignorata e la funzione Blocco Bambini è reinizializzata.
- Cancella la programmazione sveglia
- Il piedino 8 della scart deve essere ignorato.
- I riconoscimenti AV-Link WSS, EPG e televideo non sono abilitati.
- Nel caso di mancanza di segnale d'antenna, la funzione automatica di standby è disabilitata.
- Contrasto, colore, luminosità : regolazioni di fabbrica.
- Nitidezza: media (nominale)
- L'espansore contrasto é a livello basso.
- Zoom e formato a livello.

2 VORÜBERGEHENDES VERLASSEN DES SERVICE MODE

- Auf der Fernbedienung EXIT drücken.
- Mit der Taste Menü gelangen Sie zum Menü Übersicht

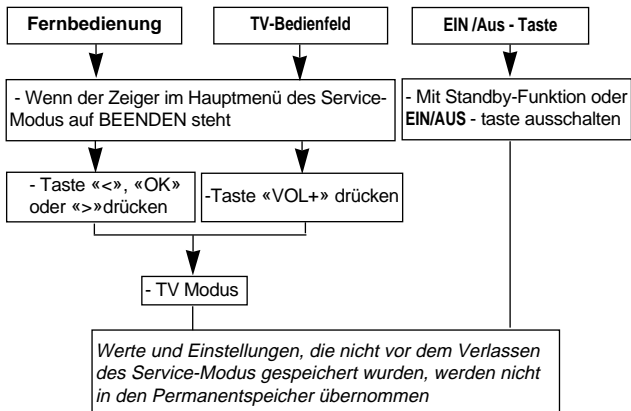
- Mit der blauen Taste gelangen sie zum Service-Menü.

2 USCITA TEMPORANEA DAL SERVICE MODE

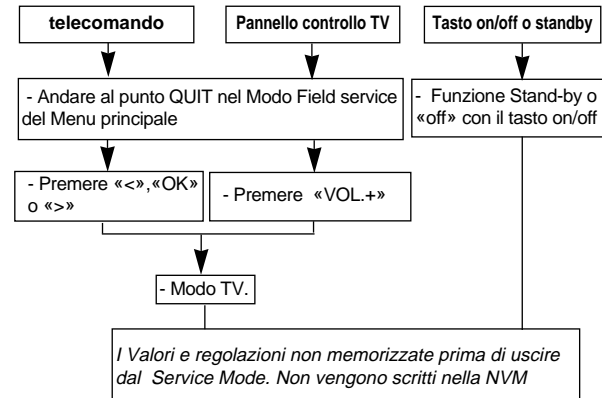
- Premere Exit sul telecomando.
- Al menu di uso quotidiano si accede attraverso il pulsante Menu.

- É possibile rientrare nel Menu Field Service attraverso il pulsante Blu.

3 ENDGÜLTIGES VERLASSEN DES SERVICE MODE

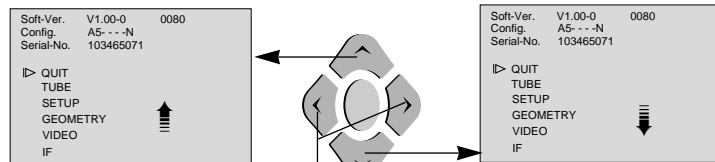


3 USCIRE DAL SERVICE MODE



II - NAVIGATION INSIDE THE SERVICE MODE - DEPLACEMENT DANS LE MODE SERVICE FUNCTIONS WALLIN SERVICE MODE - OPZIONI NEL SERVICE MODE - BUSQUEDA EN MODO SERVICIO

1 REMOTE CONTROL - TELECOMMANDE - FERNBEDIENUNG TELECOMANDO - MANDO A DISTANCIA

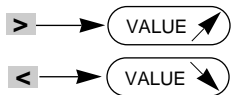


Naviagation up

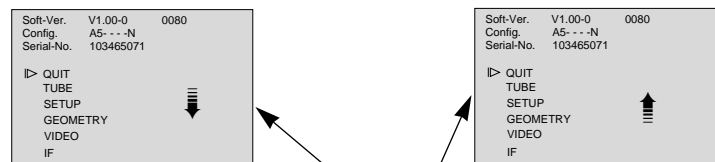
Naviagation down

- Select option
- Option anwählen
- Selezionare l'opzione
- Seleccionar opción

- "Change" value
- Wert "ändern"
- "Cambiare" valore
- "Cambiar" valor



2 TV CONTROL PANEL - CLAVIER TV - TASTATUR DES FERNSEHGERÄTS - COMANDI DEL TELEVISORE -

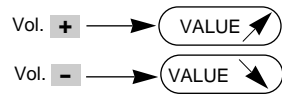


Naviagation down

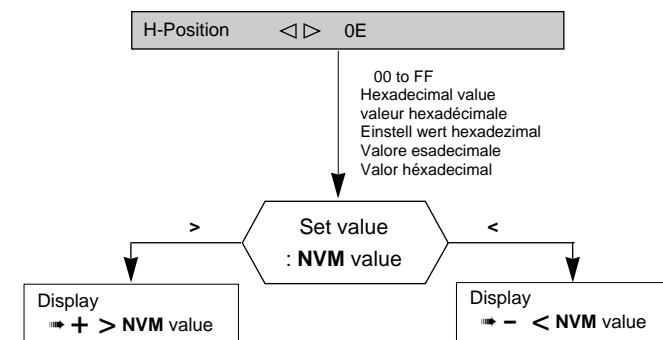
Naviagation up

- Select option
- Option anwählen
- Selezionare l'opzione
- Seleccionar opción

- "Change" value
- Wert "ändern"
- "Cambiare" valore
- "Cambiar" valor

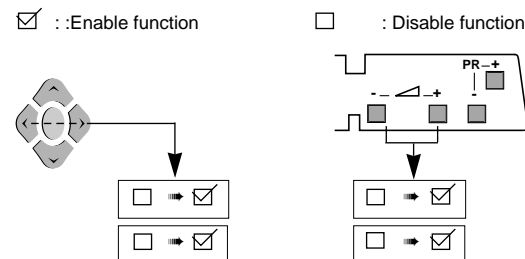


3 DISPLAYING THE VALUE OF THE SETTING - AFFICHAGE DES VALEURS - ANZEIGE DES EINSTELL WERTS VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - VISUALIZACION DEL VALOR DE AJUSTE



4 TOGGLE FUNCTIONS - VALIDATION DES FONCTIONS EIN-UND AUSSCHALT FUNKTIONEN - FUNZIONI DI COMMUTAZIONE - FUNCION CONMUTACION

To enable a function check (tick) ☒ the box.
Pour valider une fonction cocher ☒ la case correspondante
Zum Implementieren einer Funktion das Kontrollkästchen ☒ aktivieren (ankreuzen)
Per implementare una funzione di verifica, (vistare) ☒ la casella
Para poner en fucionamiento una función verifique (señale) ☒ la casilla



5 STORING VALUES IN MEMORY - MEMORISATION DES VALEURS - SPEICHERN DER WERTE - MEMORIZZAEZ I VALORI - VALORES ALMACENADOS EN LA MEMORIA

After setting, the values are stored in NVM.
Après réglages les valeurs sont mémorisées en NVM.
Nach dem Einstellen werden die Werte im NVM gespeichert.
Dopo la regolazione i valori vengono memorizzati in NVM.
Después del ajuste, los valores son almacenados en NVM

The box ☐ becomes ☒
During alignment, values are temporarily stored in RAM.
En cours d'alignement les valeurs sont mémorisées temporairement en RAM
Während des Abgleichs werden die Werte vorübergehend im RAM gespeichert
Durante l'allineamento i valori vengono memorizzati provvisoriamente sulla RAM
Durante el ajuste, los valores son almacenados temporalmente en RAM

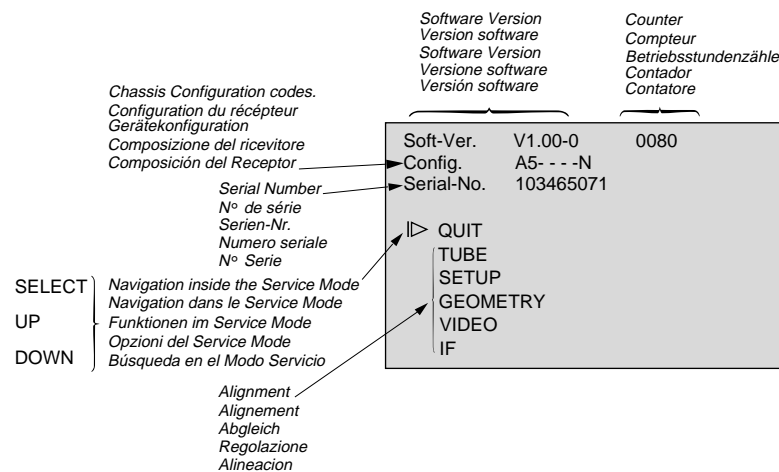
Store Copies RAM values into NVM
Copie la valeur RAM en NVM
Kopieren des Werts von RAM nach NVM
Copiare i valori RAM in NVM
Copiar valores RAM en NVM

Restore Copies all values from NVM into RAM.
Copie toutes les valeurs des données NVM en RAM
Kopiert alle NVM-Datenwerte in den RAM
Copiare tutti i valori da NVM sulla RAM
Copia todos los valores de NVM a RAM

ROM Default All the default values of a page in use are stored in RAM.
L'ensemble des valeurs par défaut d'une page courante est chargé en RAM.
Sämtliche Standardwerte der aktuellen Seite werden im RAM geladen
Tutti i valori di default di una pagina in uso vengono memorizzati sulla RAM
Todos los valores por defecto de la página en curso están almacenados en RAM.

III - LITE-MENU FOR FIELD SERVICE MODE - MENUS DU MODE SERVICE

1 MAIN MENU - MENU PRINCIPAL



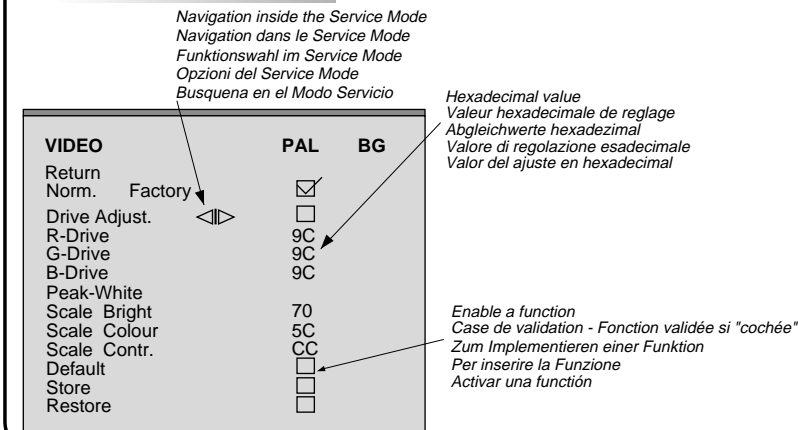
TV CONFIGURATION - CONFIGURATION DU TV - GERÄTEKONFIGURATION - CONFIGURAZIONE DEL TV - CONFIGURACIÓN DEL TV

Config.	A1Z-DKC
Character 1 : Tube type : «A» = 4/3 , «W» =16/9 Character 2 : Chassis type : «5» = 50Hz, Character 3 : Zoom available : «Z»=yes, «-»=not Character 4 : Ambient Sensor : «S»= detected, «-»= not Character 5 : Dolby : «D»=detected, «-»= not Character 6 : AV Link detected : «K»=IR link detected, «-»= not Character 7 : Chassis Variant: «N»= Nicam, «S»=Stereo	
Serial-N0.	A16-----
Character 1 : Factory : «A»= Angers , «C» =Celle, «T» =Tarancon Character 2 : Year : «G» = 1996, «H»= 1997 etc.. Character 3 : Month, from : «1»=January to «C»=December Character 4-9 : Serial N0.	

TIME COUNTER - COMPTEUR DE TEMPS - BETRIEBSSTUNDENZÄHLER - CONTATORE - CONTADOR

The counter indicates the TV's number of service hours.It counts from 0 to 65535 hours.
The display is hexadecimal.
Le compteur de temps indique le nombre d'heures de service du TV. Il compte de 0 à 65535 heures. L'affichage est en hexadécimal.
Der Zähler zeigt an, wieviele Stunden der Fernseher in Betrieb ist. Die Anzeige ist hexadezimal.
Il contatore indica il numero di ore di servizio del TV. Puo' contare da 0 a 65535. La visualizzazione è esadecimale.
El contador indica el número de horas de servicio de la TV. Cuenta de 0 a 65535 horas. El visualizador es hexadecimal.

2 SUBMENU - SOUS-MENU



ALIGNMENT PROCEDURE - PROCESSUS DE REGLAGES - ABGLEICH - VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - PROCEDIMIENTO DE ALINEACION

TUBE

Return

Tube type

Store

Restore

A66ECY...

<I>

☒

☐

SETUP

Return

Clear

Progs.

I>

Kbd.

Config.

Default

WSS

Default

Store

Restore

☐

☐

☐

☐

GEOMETRY

Return

V- Slope

V-Amplitude

V-Position

Blanking On

S - Correction

H-Position

H-Amplitude

EW-Amplitude

EW-Trapezium

Default

Store

Restore

7C

6C

7C

☐

54

94

70

78

98

☐

☐

☐

VIDEO

Return

Norm.

Factory

Drive Adjust.

R-Drive

G-Drive

B-Drive

Peak-White

Scale Bright

Scale Colour

Scale Contr.

Default

Store

Restore

☒

☐

9C

9C

9C

70

5C

CC

☐

☐

☐

IF

Return

AGC Take Over

FFI - Bit

Default

Store

Restore

<I>

88

☐

☒

☒

☒

TUBE

Return

Closes the sub-menu and returns to the "Main Service Menu". Press </> on the RCU or VOL+/VOL- on TV front panel.

Retourne au menu principal.

Verlassen des Untermenüs, das Hauptmenü des service Modes erscheint

Chiude il sottomenu e fa apparire il menu principale Field Service Mode.

Cierra el submenú. El menú Field Service Mode aparece.

Press </>: remote control; Vol. +/- : TV keyb.

Tube type

After replacing the NVM, the correct tube type number must be entered (6 characters). Once entered, the tubes geometry and video default vales are immediately activated. Variable geometry and video parameters are written to the NVM when the "STORE" line is selected. See table below for tube type numbers.

Definit le tube exact après changement de NVM. Les nouvelles valeurs de tubes (avec video et géométrie) sont actives de suite. Les paramètres de vidéo et de géométrie sont chargés en NVM lorsque STORE est sélectionné. Voir liste ci-dessous.

Nach Tausch des NVM den bildröhrentyp (6 Ziffern) auswählen. Die neuen Geometrie-und Video-defaultwerte werden sofort aktiv. Variable Geometrie- und Videowerte werden durch Speichern mit "STORE" ins NVM geschrieben. Bildrohrauflistung : siehe unten.

Scegliere il tubo appropriato dopo aver sostituito la NVM; i 6 caratteri che indicano il nuovo tipo di tubo, richiamano i valori video e geometria di default. I parametri per video e geometria vengono caricati nella NVM

After setting

Store (+)

Tube Name	LIST name	Description
A51EFS83X191	A51EFS	4.3: 21" OT: AK-Mask: Coty-M
A59EHJ43X15	A59EHJ	4.3: 25" MP: AK-Mask: Vector
A66EHJ43X15	A66EHJ	4.3: 28" MP: AK-Mask: Vector
A68EGD038X30	A68EGD	4.3: 29" SF: Invar: Vector
A80AEJ113X01	A80AEJ	4.3: 33" MP: AK-Mask: Coty-M
A59EGD048X30	A59EGD	4.3: 25" SF: Invar-Mask: Vector
A68AGA25X01	A68AGA	4.3: 29" VHP: AK-Mask: Coty-M
W56EGV023X015	W56EGV	16.9: 24" SF: Invar-Mask: Vector
W66EGV023X015	W66EGV	16.9: 28" SF: Invar-Mask: Vector
W76EGV023X015	W76EGV	16.9: 32" SF: Invar-Mask: Vector

SETUP

Return

Closes the sub-menu and returns to the "Main Service Menu".

Retourne au menu principal.

Verlassen des Untermenüs

Chiude il sottomenu e fa apparire il menu principale Field Service Mode.

Cierra el submenú. El menú Field Service Mode aparece.

Press </>: remote control; Vol. +/- : TV keyb.

Clear Prog.

Cleares all programmes STORED in memory and RESETS all PICTURE and SOUND settings to the factory default values. The AUTO INSTALL (out of factory) mode can be initialised by a long press (> 5sec.) of the selection button.

Efface tous les programmes mémorisés. valeurs SON et IMAGES: valeurs usines. Pour sortir des valeurs usine : Selection : Long press:2,5s

Löscht alle Programme und ersetzt alle Ton-und Bildeinstellungen durch Fabrikwerte. Nach erneuerm Einschalten erscheint das Installationsmenü. Anwahl: 2,5s drücken

Clear Prog.

Cancella tutti i programmi in memoria.I Valori analogici SUONO E IMMAGINE vengono riportati a livello di default. Per ristabilire le condizioni di uscita fabbrica, selezionare la funzione e premere per 2,5sec

Programa de borrado. Borra todos los programas almacenados en la memoria.Valores analógicos de SOUND PICTURE: valores de fábrica.Regreso a la TV para "salir del modo fábrica". Selección: Presión larga igual a 2,5 s.

☒ active-aktiv ☐ No active-inaktiv

Kbd. Config

Factory adjusted

Reserve au reglage usine

Reserviert für fabrikinstellungen

Riservato alla regolazione di fabbrica

Kbd. Config

<I>

Default

WSS

Automatic detection of DOLBY surround sound and 16/9 Format pictures via Teletext line number 23 is valid on all programmes.

Sélection du process WSS valid pour tous programmes

WSS (nur bei 16:9 oder Dolby) Auswertung der Zeile 23 zur automatischen Format umschaltung und Dolby umschaltung

Identificazione "auto-surround" e "format" tramite il televideo, decodificando la riga 23. La selezione di WSS è valida per tutti i programmi.

Detección "auto-surround" y "format" a través de la línea 23 de Teletext.La selección del procesamiento WSS es válida para todos los programas.

☒ detect.enable- aktiv ☐ disable-inaktiv

GEOMETRY

Return

Closes the sub-menu and returns to the "Main Service Menu".

Retourne au menu principal.

Verlassen des Untermenüs

Chiude il sottomenu e fa apparire il menu principale Field Service Mode.

Cierra el submenú. El menú Field Service Mode aparece.

Press </>: remote control; Vol. +/- : TV keyb.

V-Blanking

Press </> on the RCU or VOL+/VOL- on TV front panel.

1.Select the standard 4:3 format and zoom mode 0.

1.Sélectionner le mode zoom standard 4/3 pour tube 4/3

1.Wählen Sie den Standard-Zoom 4:3 bei 4:3 Bildröhren.

1.Selezionare il modo zoom standard 4/3 per tubo 4/3

1.Seleccione el modo de zoom estándar 4/3 para tubo 4/3.

2.Apply a test pattern signal to the TV with a single horizontal and vertical line on the screen.

2.appliquer une MIRE de BARRE avec seulement une ligne blanche horizontale en milieu de l'ecran

2.Speisen Sie ein Testbild mit nur einem horizontalen Strich in der Bildmitte ein.

2.Applicare un monoscopio con un'unica linea bianca orizzontale al centro dello schermo

2.Aplique una plantilla de prueba con sólo una línea blanca horizontal en el centro de la pantalla.

3.Select "Blanking On" line of the menu and ENABLE (tick) the function, the bottom half of the screen will go black.

3.Positinner dans le mode Service Blanking On la moitié basse de l' ecran devient noire

3.Schalten Sie den Blanking-Mode ein. Die untere Hälfte des Bildschirms wird schwarz.

3.Posizionarsi in modo Service Blanking on; la parte inferiore dello schermo diventa nera

3.Pase al modo Service Blanking On. La mitad inferior de la pantalla se vuelve negra.

4.Select the "V_Slope" line of the menu and adjust its value until the centre line of the pattern is just invisible.

4.Aligner "Vertical - Slope" pour que la ligne médiane soit à peine non visible

4.Regeln Sie "V-Slope" so ein, daß die Mittellinie nahezu verschwindet.

4.Alineare la "Vertical Slope" in modo che la linea centrale sia appena visibile.

4.Alinee "Vertical-Slope" para que la línea mediana sea casi invisible.

5.Return to the "Blanking On" line of the menu and DISABLE (un-tick) the function. ☐

5.Revenir à Blanking On et mette ☐

5.Schalten Sie den Blanking-Mode wieder ein und ☐

5.Ritornare in modo Blanking on e porre ☐

5.Vuelva a "Blanking on" y poner ☐

6.Switch the test pattern signal to the crosshatch geometry pattern.

6.Positionner la mire de quadrillage

6.Speisen Sie ein Gittertestbild ein.

6.Posizionare il monoscopio

6.Coloque la plantilla cuadriculada.

7.Perform the geometry adjustments described below.

7.Effectuer les réglages de geometrie d'écrits ci- dessous

7.Nehmen Sie die GeometrieEinstellung wie unten beschrieben vor:

7.Effettuare le regolazioni di geometria descritte in precedenza

7.Efectúe los ajustes geométricos descritos más abajo.

8.Store /Memoriser /Speichern /Memorizzare /Almacene

Correct

incorrect

After setting

Store (+)

VIDEO

Return

Closes the sub-menu and returns to the "Main Service Menu". Press </> on the RCU or VOL+/VOL- on TV front panel.

Retourne au menu principal.

Verlassen des Untermenüs

Chiude il sottomenu e fa apparire il menu principale Field Service Mode.

Cierra el submenú. El menú Field Service Mode aparece.

Press </>: remote control; Vol. +/- : TV keyb.

Normalise User Settings

Recalls the factory settings for colour, brightness, contrast and sharpness and sets contrast expand to "low".

☒ Factory settings recalled

☐ User settings kept.

R-Cut off*

G-Cut off*

R - Drive

G - Drive

B - Drive

Peak-White**

Blue cathode

Blue cathode

Tube Type

init

A51EFS

420

(600max)

A59EHJ

380

(540max)

A59EGD

400

(470max)

A66EHJ

300

(430max)

A68EGD

350

(410max)

Tube Type

init

A80AEJ

240

(340max)

W56EGV

520

(610max)

W66EGV

480

(560max)

W76EGV

300

(350max)

Scal. Brightness

Scal. Colour

Scal. Contrast

IF

Return

AGC Take Over

FFI - Bit

Default

Store

Restore

<I>

88

☐

☒

☒

☒

AGC

Minimum noise- Minimum de bruit

Minimum Rauschen- Rumore minimo

Minimo ruido

FFI - Bit

Fast filter (IF /PLL)

Filtre rapide (FI /PLL)

Schnelles filter (ZF/PLL)

Filtro rapido (IF /PLL)

☒ Asie

☐ Europ

After setting

Store (+)

4 / 3 standard mode zoom 0

<I>

overscan V=107% , H=107%

1- Adjust Vertical position and Vertical amplitude

2- Adjust Vertical Blanking and linearity

3- Adjust Horizontal position and Horizontal amplitude

4-Adjust EW Amplitude ,EW Shape and Trapezium

<4/3> zoom 1

<I>

overscan V=120% , H=120%

16 / 9 standard mode zoom 0

<I>

Adjust the vertical height until V = 80%

<16 / 9> zoom 1

<I>

Adjust the vertical height : V =90%

GEOMETRY MODE ALIGNMENT

4/3 picture tube

Signal : 4/3 test pattern

4 / 3 standard mode zoom 0

<I>

overscan V=107% , H=107%

1- Adjust Vertical position and Vertical amplitude

2- Adjust Vertical Blanking and linearity

3- Adjust Horizontal position and Horizontal amplitude

4-Adjust EW Amplitude ,EW Shape and Trapezium

<4/3> zoom 1

<I>

overscan V=120% , H=120%

16 / 9 standard mode zoom 0

<I>

Adjust the vertical height until V = 80%

<16 / 9> zoom 1

<I>

Adjust the vertical height : V =90%

16/9 picture tube

Signal : 4/3 test pattern

16 / 9 standard mode zoom 0

<I>

overscan V=107%, H =107%

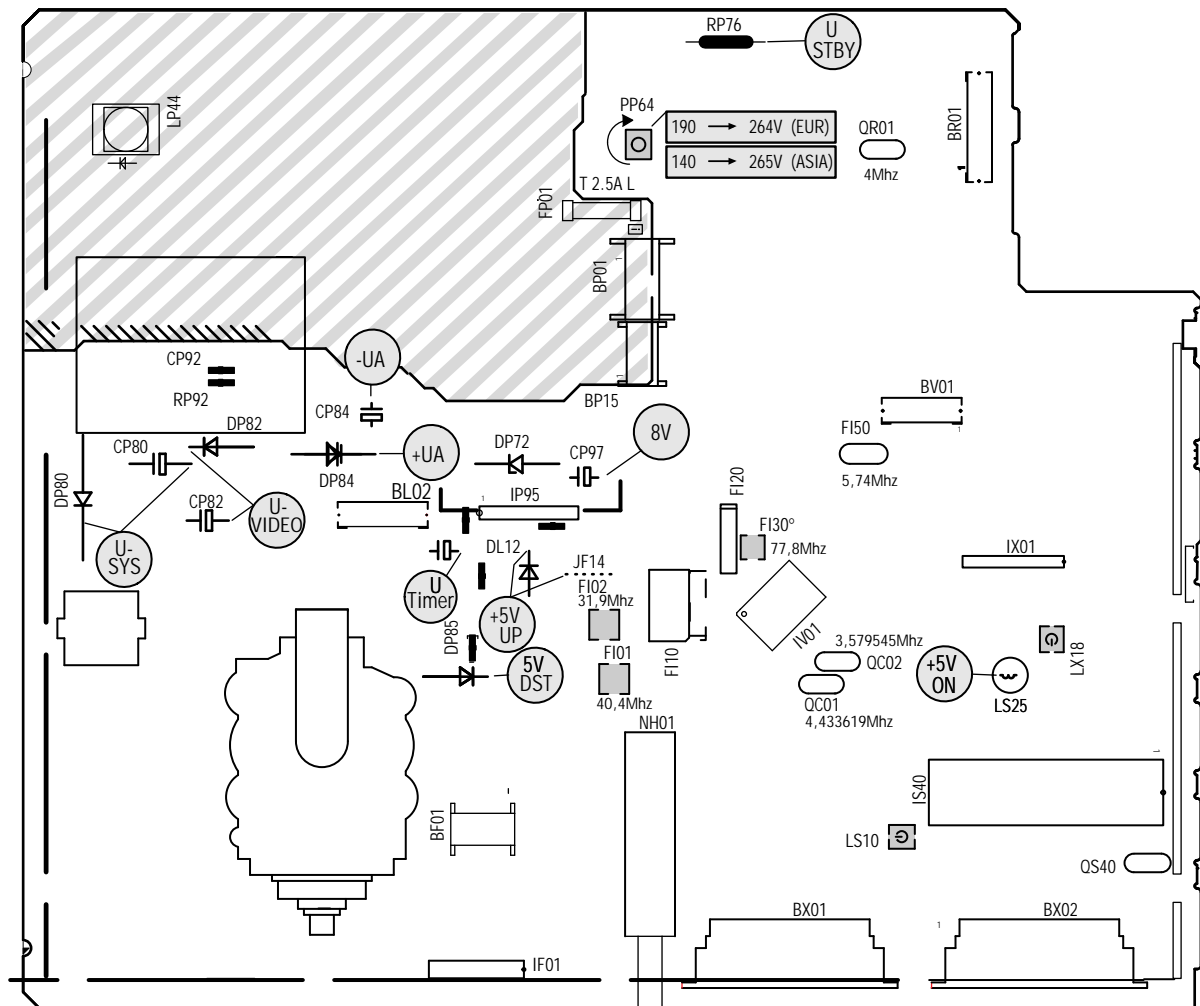
1- Adjust Vertical position and Vertical amplitude

2- Adjust Vertical Blanking and linearity

3- Adjust Horizontal position and Horizontal amplitude

4-Adjust EW Amplitude ,EW Shape and Trapezium

LOCATION OF CONTROLS - EMBLACEMENT DES REGLAGES - SERVICE LAGEPLAN - POSIZIONE REGOLATORI DI SERVIZIO - SITUACIÓN DE LOS AJUSTES



° it is not necessary, to adjust FI30 by after sales



Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello chassis collegata alla rete.
Parte del chassis conectada a la red.



Use isolating mains transformer -
Utiliser un transformateur isolateur du secteur -
Trenntrafo verwenden -
Utilizar un transformador aislador de red -
Utilizzare un trasformatore per isolarvi dalla rete

ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONI - AJUSTES

U Sys	PP 64			<table border="1"> <thead> <tr> <th>Tube</th><th>Format</th><th>Usys</th><th>Jumper</th><th>RL65</th></tr> </thead> <tbody> <tr> <td>A51EFS83X191</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A59EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr> <td>A66EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr> <td>A59EGD048X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A68EGD038X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A68AGA25X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A80AEJ15X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>W56EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr> <td>W66EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr> <td>W76EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> </tbody> </table>	Tube	Format	Usys	Jumper	RL65	A51EFS83X191	4:3	126V+/-0,5V	JL80	4k7	A59EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A66EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A59EGD048X30	4:3	126V+/-0,5V	JL80	4k7	A68EGD038X30	4:3	126V+/-0,5V	JL80	4k7	A68AGA25X01	4:3	126V+/-0,5V	JL80	4k7	A80AEJ15X01	4:3	126V+/-0,5V	JL80	4k7	W56EGV023X015	16:9	138V+/-0,5V	JL82	47k	W66EGV023X015	16:9	138V+/-0,5V	JL82	47k	W76EGV023X015	16:9	138V+/-0,5V	JL82	47k
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IF Alignment Alignement FI	trap 40,4Mhz FI 01	Switch set to standard BG Commuter le TV au standard BG IF Signal 40,4MHz (BG) 31,9MHz (BG)		Adjust FI01 for minimum value at 40,4Mhz																																																							
	trap 31,9Mhz FI 02	50 mV 		Adjust FI20 for minimum value at 31,9Mhz																																																							
U G2 / cutoff	SCREEN	 AV (no Signal, black screen)	CRT IB01: pins 9 / 12 / 15 highest output																																																								
FOCUS	FOCUS LL05	Test pattern (standard values)		Sharp picture																																																							

E

1 ACCESO AL MODO SERVICIO

▼

- | | | |
|------------|-----------|------|
| Soft-Ver. | V1.00-0 | 0080 |
| Config. | A5- ---N | |
| Serial-No. | 103465071 | |
- ▶ QUIT
TUBE
SETUP
GEOMETRY
VIDEO
IF

- Se ignora la función de bloqueo y se inicializa la función "cerradura niños".
- Anula todas las horas programadas
- La patilla 8 del SCART es ignorada
- La detección WSS AV Link, EPG, y Telexo son desactivados.
- El apagado automático en caso de ausencia de señal de antena es desactivado.
- El contraste,color y brillo son puestos a los valores de fábrica.
- la nitidez es puesta al punto medio.
- La expansión de contrast al nivel bajo
- Modo Instalación es desactivado.
- Zoom y formato ignorados.

- Puede entrar al Menú Servicio con el botón azul.

```

graph TD
    A[telecomando] --> C
    B[Panel de control TV] --> C
    D[Tecla on/off de] --> E
    C["- Vaya al punto QUIT del menú principal de modo Servicio"] --> F["- Pulse el botón «<», «OK» o «>»"]
    C --> G["- Pulse el botón «VOL.+»"]
    F --> H["- Modo TV."]
    G --> H
    H --> I["Los valores o ajustes no se guardan antes de salir del modo servicio y no se escriben en la NVM"]
    E --> J["- Función Stand-by o desconexión (off) con tecla on/off."]
    J --> I

```

Soft-Ver. V1.00-0 0080
Config. A5 - - - N
Serial-No. 103465071

▶ QUIT
TUBE
SETUP
GEOMETRY
VIDEO
IF

Soft-Ver. V1.00-0 0080
Config. A5 - - - N
Serial-No. 103465071




▶ QUIT
TUBE
SETUP
GEOMETRY
VIDEO
IF




Naviagation down

- The diagram illustrates the data flow between two terminal windows. The left window displays the command sequence: `I> QUIT`, `TUBE`, `SETUP`, `GEOMETRY`, `VIDEO`, and `IF`. The right window displays the same sequence: `I> QUIT`, `TUBE`, `SETUP`, `GEOMETRY`, `VIDEO`, and `IF`. Arrows indicate the flow of data from the left window to the right window.

Naviagation up

- Select option
 - Option anwählen
 - Selezionare l'opzione
 - Seleccionar opción
-
- "Change" value
 - Wert "ändern"
 - "Cambiare" valore
 - "Cambiar" valor

Vol.   VALUE 

Vol.   VALUE 

Chassis Configuration codes.
Configuration du récepteur
Gerätekonfiguration
Composizione del ricevitore
Composicion del Receptor

Serial Number
N° de série
Serien-Nr.
Numero seriale
N° Serie

Navigation inside the Service Mode
Navigation dans le Service Mode
Funktionen im Service Mode
Opzioni del Service Mode
Búsqueda en el Modo Servicio

Alignment
Alignement
Abgleich
Regolazione
Alineacion

Software Version
Version software
Software Version
Versione software
Version software

Counter
Compteur
Betriebsstundenzähler
Contador
Contatore

Soft-Ver. V1.00-0 0080
Config. A5---N
Serial-No. 103465071
I> QUIT
TUBE SETUP
GEOMETRY
VIDEO
IF

Character 1 : Tube type : «A» = 4/3 , «W» = 16/9
Character 2 : Chassis type : «S» = 50Hz,
Character 3 : Zoom available : «Z» =yes, «-» =not
Character 4 : Ambient Sensor : «S» = detected, «-» = not
Character 5 : Dolby : «D» =detected, «-» = not
Character 6 : AV Link detected : «K» = IR link detected, «-» = not
Character 7 : Chassis Variant: «N» = Nicaam, «S» =Stereo

Character 1 : Factory : «A»= Angers , «C» =Celle, «T» =Tarancon
Character 2 : Year : «G» = 1996, «H»= 1997 etc..
Character 3 : Month, from : «1»=January to «C»=December
Character 4-9 : Serial N0.

Le compteur de temps indique le nombre d'heures de service du TV. Il compte de 0 à 65535 heures. L'affichage est en hexadécimal.
Der Zähler zeigt an, wieviele Stunden der Fernseher in Betrieb ist. Die Anzeige ist hexadezimal.
Il contatore indica il numero di ore di servizio del TV. Può contare da 0 a 65535. La visualizzazione è esadecimale.
El contador indica el número de horas de servicio de la TV. Cuenta de 0 a 65535 horas. El visualizador es hexadecimal.

The screenshot shows the Service Mode menu with the following items: VIDEO, PAL, and BG. Under VIDEO, there are options: Return Norm., Drive Adjust., R-Drive, G-Drive, B-Drive, Peak-White, Scale Bright, Scale Colour, Scale Contr., Default, Store, and Restore. Under PAL, there are options: 70, 5C, CC, and three empty checkboxes. Under BG, there are three empty checkboxes. Annotations include: 'Navigation inside the Service Mode' pointing to the top of the menu; 'Navigation dans le Service Mode' pointing to the top of the menu; 'Funktionswahl im Service Mode' pointing to the top of the menu; 'Opzioni del Service Mode' pointing to the top of the menu; 'Busquena en el Modo Servicio' pointing to the top of the menu; 'Hexadecimal value' pointing to the top of the menu; 'Valeur hexadécimale de réglage' pointing to the top of the menu; 'Abgleichwerte hexadecimal' pointing to the top of the menu; 'Valore di regolazione esadecimale' pointing to the top of the menu; 'Valor del ajuste en hexadecimal' pointing to the top of the menu; 'Factory' pointing to the 'Return Norm.' option; 'Enable a function' pointing to the 'Store' option; 'Case de validation - Fonction validée si "cochée"' pointing to the 'Store' option; 'Zum Implementieren einer Funktion' pointing to the 'Store' option; 'Per inserire la Funzione' pointing to the 'Store' option; and 'Activar una función' pointing to the 'Store' option.

ALIGNMENT PROCEDURE - PROCESSUS DE REGLAGES - ABGLEICH - VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - PROCEDIMIENTO DE ALINEACION

TUBE

Return

Tube type

Store

Restore

A66ECY...

<|>

☒

☐

SETUP

Return

Clear

Progs.

▶

Kbd.

Config.

Default

WSS

Default

Store

Restore

☐

☐

☐

☐

GEOMETRY

Return

V- Slope

V-Amplitude

V-Position

Blanking On

S - Correction

H-Position

H-Amplitude

EW-Amplitude

EW-Trapezium

Default

Store

Restore

7C

6C

7C

☐

54

94

70

78

98

☐

☐

☐

VIDEO

Return

Norm.

Factory

Drive Adjust.

R-Drive

G-Drive

B-Drive

Peak-White

Scale Bright

Scale Colour

Scale Contr.

Default

Store

Restore

☒

☐

9C

9C

9C

70

5C

CC

☐

☐

☐

IF

Return

AGC Take Over

FFI - Bit

Default

Store

Restore

<|>

88

☐

☒

☒

☒

TUBE

Return

Closes the sub-menu and returns to the "Main Service Menu". Press </> on the RCU or VOL+/VOL- on TV front panel.

Retourne au menu principal.

Verlassen des Untermenüs, das Hauptmenü des service Modes erscheint

Chiude il sottomenu e fa apparire il menu principale Field Service Mode.

Cierra el submenú. El menú Field Service Mode aparece.

Press </>: remote control; Vol. +/- : TV keyb.

Tube type

After replacing the NVM, the correct tube type number must be entered (6 characters). Once entered, the tubes geometry and video default vales are immediately activated. Variable geometry and video parameters are written to the NVM when the "STORE" line is selected. See table below for tube type numbers.

Definit le tube exact après changement de NVM. Les nouvelles valeurs de tubes (avec video et géométrie) sont actives de suite. Les paramètres de vidéo et de géométrie sont chargés en NVM lorsque STORE est sélectionné. Voir liste ci-dessous.

Nach Tausch des NVM den bildröhrentyp (6 Ziffern) auswählen. Die neuen Geometrie-und Video-defaultwerte werden sofort aktiv. Variable Geometrie- und Videowerte werden durch Speichern mit "STORE" ins NVM geschrieben. Bildrohrauflistung : siehe unten.

Scegliere il tubo appropriato dopo aver sostituito la NVM; i 6 caratteri che indicano il nuovo tipo di tubo, richiamano i valori video e geometria di default. I parametri per video e geometria vengono caricati nella NVM

Kbd. Config

Factory adjusted

Reserve au reglage usine

Reserviert für fabrikinstellungen

Riservato alla regolazione di fabbrica

Kbd. Config

<|>

Default

WSS

Automatic detection of DOLBY surround sound and 16/9 Format pictures via Teletext line number 23 is valid on all programmes.

Sélection du process WSS valid pour tous programmes

WSS (nur bei 16:9 oder Dolby)

Auswertung der Zeile 23 zur automatischen Format umschaltung und Dolby umschaltung

Identificazione "auto-surround" e "format" tramite il televideo, decodificando la riga 23. La selezione di WSS è valida per tutti i programmi.

Detección "auto-surround" y "format" a través de la línea 23 de Teletext.La selección del procesamiento WSS es válida para todos los programas.

After setting

Store (+)

☒

Tube Name	LIST name	Description
A51EFS83X191	A51EFS	4.3: 21" OT: AK-Mask: Coty-M
A59EHJ43X15	A59EHJ	4.3: 25" MP: AK-Mask: Vector
A66EHJ43X15	A66EHJ	4.3: 28" MP: AK-Mask: Vector
A68EGD038X30	A68EGD	4.3: 29" SF: Invar: Vector
A80AEJ113X01	A80AEJ	4.3: 33" MP: AK-Mask: Coty-M
A59EGD048X30	A59EGD	4.3: 25" SF: Invar-Mask: Vector
A68AGA25X01	A68AGA	4.3: 29" VHP: AK-Mask: Coty-M
W56EGV023X015	W56EGV	16:9: 24" SF: Invar-Mask: Vector
W66EGV023X015	W66EGV	16:9: 28" SF: Invar-Mask: Vector
W76EGV023X015	W76EGV	16:9: 32" SF: Invar-Mask: Vector

Test Pattern Signal used: 4/3 with geometric circle. Adjust separate for 4/3 and 16/9 format. See annexed

GEOMETRY

Return

Closes the sub-menu and returns to the "Main Service Menu".

Retourne au menu principal.

Verlassen des Untermenüs

Chiude il sottomenu e fa apparire il menu principale Field Service Mode.

Cierra el submenú. El menú Field Service Mode aparece.

Press </>: remote control; Vol. +/- : TV keyb.

V-Blanking

Press </> on the RCU or VOL+/VOL- on TV front panel.

1.Select the standard 4:3 format and zoom mode 0.

1.Sélectionner le mode zoom standard 4/3 pour tube 4/3

1.Wählen Sie den Standard-Zoom 4:3 bei 4:3 Bildröhren.

1.Selezionare il modo zoom standard 4/3 per tubo 4/3

1.Seleccione el modo de zoom estándar 4/3 para tubo 4/3.

2.Apply a test pattern signal to the TV with a single horizontal and vertical line on the screen.

2.appliquer une MIRE de BARRE avec seulement une ligne blanche horizontale en milieu de l'ecran

2.Speisen Sie ein Testbild mit nur einem horizontalen Strich in der Bildmitre ein.

2.Applicare un monoscopio con un'unica linea bianca orizzontale al centro dello schermo

2.Aplique una plantilla de prueba con sólo una línea blanca horizontal en el centro de la pantalla.

3.Select "Blanking On" line of the menu and ENABLE (tick) the function, the bottom half of the screen will go black.

3.Positinner dans le mode Service Blanking On la moitié basse de l' ecran devient noire

3.Schalten Sie den Blanking-Mode ein. Die untere Hälfte des Bildschirms wird schwarz.

3.Posizionarsi in modo Service Blanking on; la parte inferiore dello schermo diventa nera

3.Pase al modo Service Blanking On. La mitad inferior de la pantalla se vuelve negra.

4.Select the "V_Slope" line of the menu and adjust its value until the centre line of the pattern is just invisible.

4.Aligner "Vertical - Slope" pour que la ligne mediane soit a peine non visible

4.Regeln Sie "V-Slope" so ein, daß die Mittellinie nahezu verschwindet.

4.Alineare la "Vertical Slope" in modo che la linea centrale sia appena visibile

4.Alinee "Vertical-Slope" para que la línea mediana sea casi invisible.

5.Return to the "Blanking On" line of the menu and DISABLE (un-tick) the function. ☐

5.Revenir à Blanking On et mette ☐

5.Schalten Sie den Blanking-Mode wieder ein und ☐

5.Ritornare in modo Blanking on e porre ☐

5.Vuelva a "Blanking on" y poner ☐

6.Switch the test pattern signal to the crosshatch geometry pattern.

6.Positioner la mire de quadrillage

6.Speisen Sie ein Gittertestbild ein.

6.Posizionare il monoscopio

6.Coloque la plantilla cuadriculada.

7.Perform the geometry adjustments described below.

7.Effectuer les reglages de geometrie d'écrits ci- dessous

7.Nehmen Sie die Geometrieeinstellung wie unten beschrieben vor:

7.Effettuare le regolazioni di geometria descritte in precedenza

7.Efectúe los ajustes geométricos descritos más abajo.

8.Store /Memoriser /Speichern /Memorizzare /Almacene

GEOMETRY

9.Adjust position H.

9.Regler la position H

9.Korrigieren Sie Horizontale Lage.

9.Regolare la posizione H

9.Ajuste la posición H

10.Ajuster l'amplitude H

10.Adjust amplitude H.

10.Korrigieren Sie Horizontal-Amplitude

10.Regolare l'ampiezza H

10.Ajuste la amplitud H

11-12.Correction of EW pincushion distortion.

11-12.Correction de coussin EW

11-12.Korrektur der Ost/West Kissenverzerrung.

11-12.Correzione della distorsione a cuscino EW

11-12.Corrección de la distorsión de cojin EW

13.Correction of corners (Shape).

13.Correction de coins (Shape)

13.Korrektur der Ecken.

13.Correzione degli angoli (Forma)

13.Corrección de esquinas (Shape)

14.Trapeze. / Trapèze

14.Trapez-Verzerrung.

14.Trapezio / Trapecio

"These adjustments are not necessary for 4:3 tubes in 16:9 mode"

"Pour les tubes 4/3 en mode 16/9, ces réglages ne sont pas necessaire"

"Diese Einstellungen sind nicht für 4:3 Bildröhren im 16:9 Betrieb erforderlich."

"Queste regolazioni non sono necessarie per tubi 4/3 in modo 16/9"

"Estos ajustes no son necesarios para los tubos 4/3 en modo 16/9"

V-Amplitude

V-Position

H-Position

S-Correction

H-Amplitude

EW - Amplitude

EW - Trapezium

EW -Shape

☐

☐

☐

☐

☐

☐

☐

☐

Peak-White**

Blue cathode

CRT Pin 6,8,11

Blue cathode

Tube Type

[init]

A51EFS

420

(600max)

A59EHJ

380

(540max)

A59EGD

400

(470max)

A66EHJ

300

(430max)

A68EGD

350

(410max)

Tube Type

[init]

A80AEJ

240

(340max)

W56EGV

520

(610max)

W66EGV

480

(560max)

W76EGV

300

(350max)

Scal. Brightness

☐

+ ☐

= 50%

☐

= 100%

Grey scale test pattern white =100%

black

Scal. Colour

☐

+ ☐

+ ☐

=nom.

PAL (then SECAM +RGB)

75% Colour bar test pattern via RF.

Blue Cathode

CRT

F-H

Correct

incorrect

After setting

Store (+)

☒

The signals colour standard is auto detected and displayed opposite the main menu line.

VIDEO

Return

Closes the sub-menu and returns to the "Main Service Menu".

Press </> on the RCU or VOL+/VOL- on TV front panel.

Retourne au menu principal.

Verlassen des Untermenüs

Chiude il sottomenu e fa apparire il menu principale Field Service Mode.

Cierra el submenú. El menú Field Service Mode aparece.

Press </>: remote control; Vol. +/- : TV keyb.

Normalise User Settings

Recalls the factory settings for colour, brightness, contrast and sharpness and sets contrast expand to "low".

☒ Factory settings recalled

☐ User settings kept.

R-Cut off*

G-Cut off*

R - Drive

G - Drive

B - Drive

☐

☐

☐

☐

☐

☐

☐

☐

Peak-White**

Blue cathode

CRT Pin 6,8,11

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[init]

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black

Scal. Colour

☐

+ ☐

+ ☐

=nom.

PAL (then SECAM +RGB)

75% Colour bar test pattern via RF.

Blue Cathode

CRT

F-H

Correct

incorrect

After setting

Store (+)

☒

GEOMETRY MODE ALIGNMENT

4/3 picture tube

Signal : 4/3 test pattern

4 / 3 standard mode zoom 0

overscan V=107% , H=107%

1- Adjust Vertical position and Vertical amplitude

2- Adjust Vertical Blanking and linearity

☐

☐

3- Adjust Horizontal position and Horizontal amplitude

☐

☐

4-Adjust EW Amplitude ,EW Shape and Trapezium

☐

☐

☐

<4/3> zoom 1

overscan V=120% , H=120%

☐

☐

16 / 9 standard mode zoom 0

Adjust the vertical height until V = 80%

☐

<16 / 9> zoom 1

Adjust the vertical height : V =90%

☐

16/9 picture tube

Signal : 4/3 test pattern

16 / 9 standard mode zoom 0

overscan V=107%, H =107%

1- Adjust Vertical position and Vertical amplitude

2- Adjust Vertical Blanking and linearity

☐

☐

3- Adjust Horizontal position and Horizontal amplitude

☐

☐

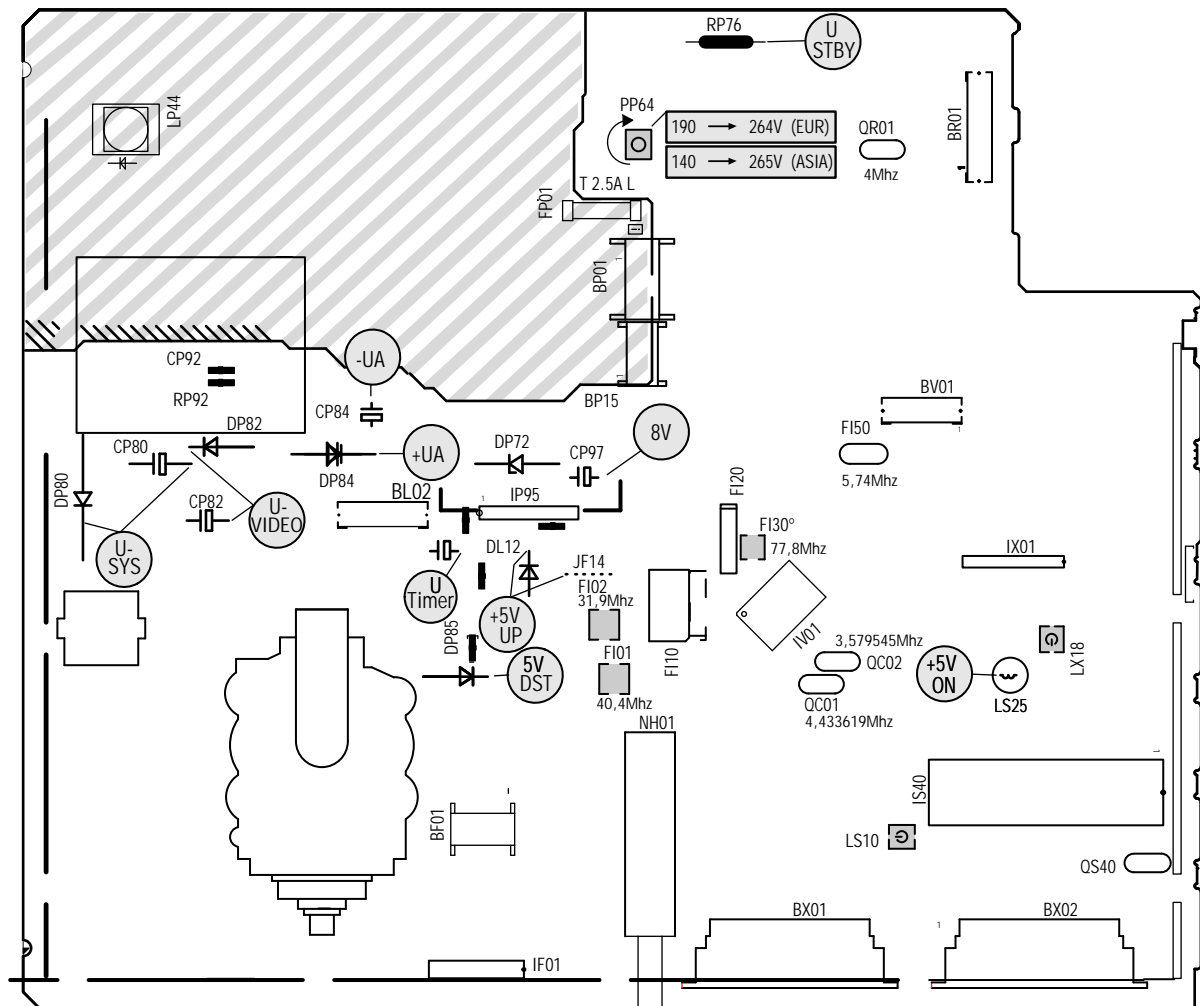
4-Adjust EW Amplitude ,EW Shape and Trapezium

☐

☐

☐

LOCATION OF CONTROLS - EMBLACEMENT DES REGLAGES - SERVICE LAGEPLAN - POSIZIONE REGOLATORI DI SERVIZIO - SITUACIÓN DE LOS AJUSTES



° it is not necessary , to adjust F130 by after sales



Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello chassis collegata alla rete.
Parte del chassis conectada a la red.



Use isolating mains transformer -
Utiliser un transformateur isolateur du secteur -
Trenntrafo verwenden -
Utilizar un transformador aislador de red -
Utilizzare un trasformatore per isolarvi dalla rete

ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONI - AJUSTES

U Sys	PP 64			<table border="1"> <thead> <tr> <th>Tube</th><th>Format</th><th>Usys</th><th>Jumper</th><th>RL65</th></tr> </thead> <tbody> <tr> <td>A51EFS83X191</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A59EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr> <td>A66EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr> <td>A59EGD048X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A68EGD038X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A68AGA25X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A80AEJ15X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>W56EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr> <td>W66EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr> <td>W76EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> </tbody> </table>	Tube	Format	Usys	Jumper	RL65	A51EFS83X191	4:3	126V+/-0,5V	JL80	4k7	A59EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A66EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A59EGD048X30	4:3	126V+/-0,5V	JL80	4k7	A68EGD038X30	4:3	126V+/-0,5V	JL80	4k7	A68AGA25X01	4:3	126V+/-0,5V	JL80	4k7	A80AEJ15X01	4:3	126V+/-0,5V	JL80	4k7	W56EGV023X015	16:9	138V+/-0,5V	JL82	47k	W66EGV023X015	16:9	138V+/-0,5V	JL82	47k	W76EGV023X015	16:9	138V+/-0,5V	JL82	47k
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IF Alignment Alignement FI	trap 40,4Mhz FI 01	Switch set to standard BG Commuter le TV au standard BG IF Signal 40,4MHz (BG) 31,9MHz (BG)		Adjust FI01 for minimum value at 40,4Mhz																																																							
	trap 31,9Mhz FI 02	50 mV 		Adjust FI20 for minimum value at 31,9Mhz																																																							
U G2 / cutoff	SCREEN	 AV (no Signal, black screen)	CRT IB01: pins 9 / 12 / 15 highest output																																																								
FOCUS	FOCUS LL05	Test pattern (standard values)		Sharp picture																																																							

I - EIN-AUSTIEG SERVICE MODE - ACCESSO/USCITA ALLA/DALLA FUNZIONE

I EINSTIEG IN DEN SERVICE MODE

Zugriff über die Tastatur des Fernsehgeräts

- Mit der Fernbedienung das Fernsehgerät in Stand-by schalten. Das Gerät mit dem Netzschalter ausschalten (warten bis LED dunkel ist)
- Gleichzeitig die Tasten **PR-** und **VOL-** drücken und den TV über die EIN/AUS-Taste einschalten.
- Die Tasten **PR-** und **VOL-** (8s) gedrückt halten.

Soft-Ver. V1.00-0 0080
 Config. A5- - - N
 Serial-No. 103465071

► QUIT
 TUBE
 SETUP
 GEOMETRY
 VIDEO
 IF

Anmerkung :

Im SERVICE MODE :

- wird die Sperrfunktion (PIN-Nummer) ignoriert und die Kindersicherung gelöscht (reinitialisiert).
- werden alle Ein- und Ausschaltzeitgeber gelöscht.
- wird die SCART - Schaltspannung ignoriert.
- werden AV- Link WSS, EPG und Teletext gesperrt
- wird die automatische Abschaltung bei fehlendem Antennensignal gesperrt.
- werden Kontrast, Farbe und Helligkeit auf Standardwerte gesetzt.
- wird die Bildschärfe auf Mittelstellung (nominal) gesetzt.
- wird der Kontrast-Expander auf "gering.." gesetzt.
- wird das Standardformat bzw. der Standard-Zoom modus gewählt.

I ACCESSO AL SERVICE MODE

tramite i comandi del televisore

- Commutare il televisore in stand-by con il telecomando. Spegner l'apparecchio con l'interruttore di rete (attendere finché il LED è spento)
- Tenere premuti i tasti **PR- e VOL-** accendendo il TV con il pulsante ON/OFF.
- Premere i pulsanti **PR - e VOL-** (8s).

Soft-Ver. V1.00-0 0080
 Config. A5- - - N
 Serial-No. 103465071

► QUIT
 TUBE
 SETUP
 GEOMETRY
 VIDEO
 IF

Nota :

Nel service mode:

- la funzione Blocco (Numero Pin) viene ignorata e la funzione Blocco Bambini è reinizializzata.
- Cancella la programmazione sveglia
- Il piedino 8 della scart deve essere ignorato.
- I riconoscimenti AV-Link WSS, EPG e televideo non sono abilitati.
- Nel caso di mancanza di segnale d'antenna, la funzione automatica di standby è disabilitata.
- Contrasto, colore, luminosità : regolazioni di fabbrica.
- Nitidezza: media (nominale)
- L'espansore contrasto é a livello basso.
- Zoom e formato a livello.

2 VORÜBERGEHENDES VERLASSEN DES SERVICE MODE

- Auf der Fernbedienung EXIT drücken.
- Mit der Taste Menü gelangen Sie zum Menü Übersicht

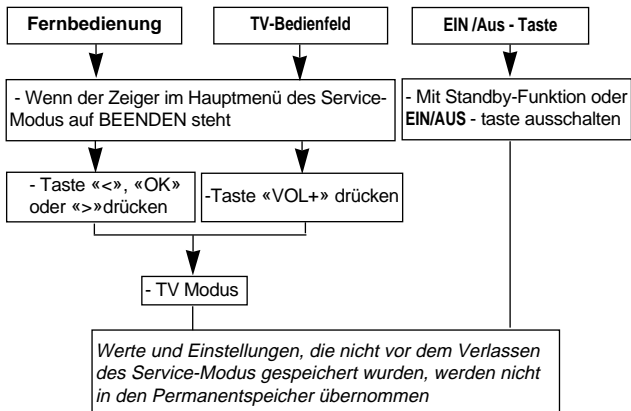
- Mit der blauen Taste gelangen sie zum Service-Menü.

2 USCITA TEMPORANEA DAL SERVICE MODE

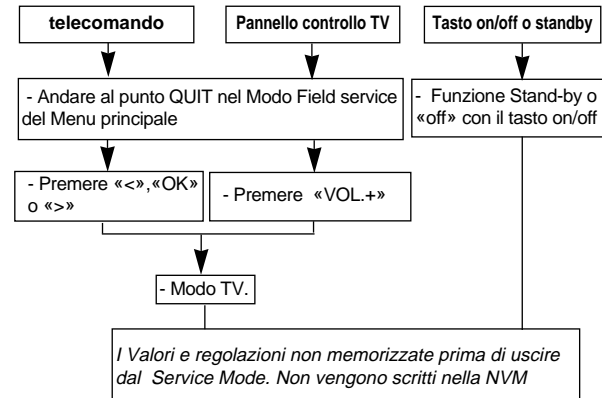
- Premere Exit sul telecomando.
- Al menu di uso quotidiano si accede attraverso il pulsante Menu.

- É possibile rientrare nel Menu Field Service attraverso il pulsante Blu.

3 ENDGÜLTIGES VERLASSEN DES SERVICE MODE



3 USCIRE DAL SERVICE MODE



MODO SERVICIO

E

I - ENTRADA/SALIDA MODO SERVICIO

1 ACCESO AL MODO SERVICIO

Acceso con panel control TV

- Con el mando a distancia conectar a STANDBY el televisor. Desconectar el aparato con el interruptor de la red (esperar hasta que el LED se apague).
- Pulse los botones **PR** - y **VOL** - y sin soltarlos, pulsar la tecla MARCHA:PARADA.
- Libere los botones **PR** - y **VOL** - (8S).

Soft-Ver. V1.00-0 0080
Config. A5- - - N
Serial-No. 103465071

II> QUIT
TUBE
SETUP
GEOMETRY
VIDEO
IF

Nota :

En modo servicio:

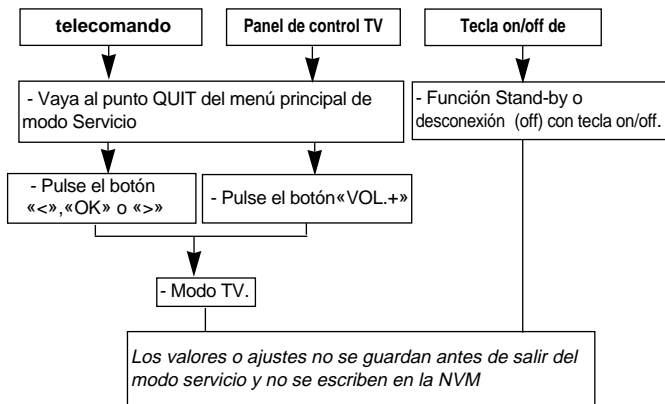
- Se ignora la función de bloqueo y se inicializa la función "cerradura niños".
- Anula todas las horas programadas
- La patilla 8 del SCART es ignorada
- La detección WSS AV Link, EPG, y Telexo son desactivados.
- El apagado automático en caso de ausencia de señal de antena es desactivado.
- El contraste,color y brillo son puestos a los valores de fábrica.
- la nitidez es puesta al punto medio.
- La expansión de contrast al nivel bajo
- Modo Instalación es desactivado.
- Zoom y formato ignorados.

2 SALIDA TEMPORAL DEL MODO SERVICIO

- Pulse Salir en el mando a distancia
- Con el botón Menu puede acceder al menú de uso cotidiano.

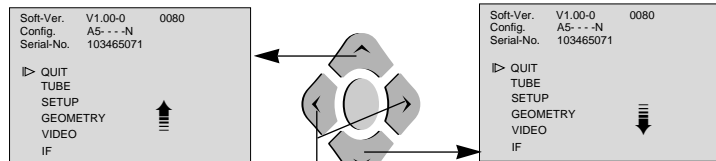
- Puede entrar al Menú Servicio con el botón azul.

3 SALIDA DEL MODO SERVICIO



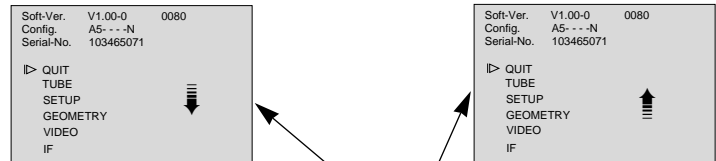
II - NAVIGATION INSIDE THE SERVICE MODE - DEPLACEMENT DANS LE MODE SERVICE FUNCTIONS WALLIN SERVICE MODE - OPZIONI NEL SERVICE MODE - BUSQUEDA EN MODO SERVICIO

1 REMOTE CONTROL - TELECOMMANDE - FERNBEDIENUNG TELECOMANDO - MANDO A DISTANCIA



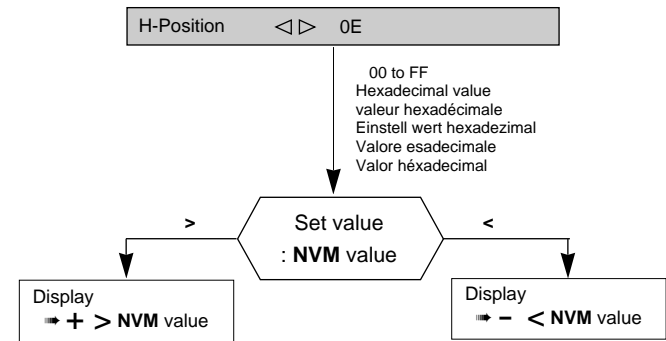
- Select option
 - Option anwählen
 - Selezionare l'opzione
 - Seleccionar opción
- "Change" value
- Wert "ändern"
- "Cambiare" valore
- "Cambiar" valor
- VALUE
- VALUE

2 TV CONTROL PANEL - CLAVIER TV - TASTATUR DES FERNSEHGERÄTS - COMANDI DEL TELEVISORE -



- Select option
 - Option anwählen
 - Selezionare l'opzione
 - Seleccionar opción
- "Change" value
- Wert "ändern"
- "Cambiare" valore
- "Cambiar" valor
- Vol. + → VALUE
- Vol. - → VALUE

3 DISPLAYING THE VALUE OF THE SETTING - AFFICHAGE DES VALEURS - ANZEIGE DES EINSTELL WERTS VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - VISUALIZACION DEL VALOR DE AJUSTE



4 TOGGLE FUNCTIONS - VALIDATION DES FONCTIONS EIN-UND AUSSCHALT FUNKTIONEN - FUNZIONI DI COMMUTAZIONE - FUNCION CONMUTACION

To enable a function check (tick) ☒ the box.

Pour valider une fonction cocher ☒ la case correspondante

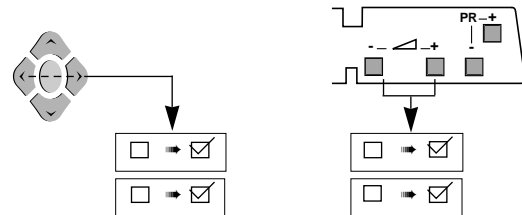
Zum Implementieren einer Funktion das Kontrollkästchen ☒ aktivieren (ankreuzen)

Per implementare una funzione di verifica, (vistare) ☒ la casella

Para poner en fucionamiento una función verifique (señale) ☒ la casilla

☒ : Enable function

☐ : Disable function



5 STORING VALUES IN MEMORY - MEMORISATION DES VALEURS - SPEICHERN DER WERTE - MEMORIZZAEZ I VALORI - VALORES ALMACENADOS EN LA MEMORIA

After setting, the values are stored in NVM.

Après réglages les valeurs sont mémorisées en NVM.

Nach dem Einstellen werden die Werte im NVM gespeichert.

Dopo la regolazione i valori vengono memorizzati in NVM.

Después del ajuste, los valores son almacenados en NVM

The box ☐ becomes ☒

During alignment, values are temporarily stored in RAM.

En cours d'alignement les valeurs sont mémorisées temporairement en RAM

Während des Abgleichs werden die Werte vorübergehend im RAM gespeichert

Durante l'allineamento i valori vengono memorizzati provvisoriamente sulla RAM

Durante el ajuste, los valores son almacenados temporalmente en RAM

Store

- ⇒ Copies RAM values into NVM
- Copie la valeur RAM en NVM
- Kopieren des Werts von RAM nach NVM
- Copiare i valori RAM in NVM
- Copiar valores RAM en NVM

Restore

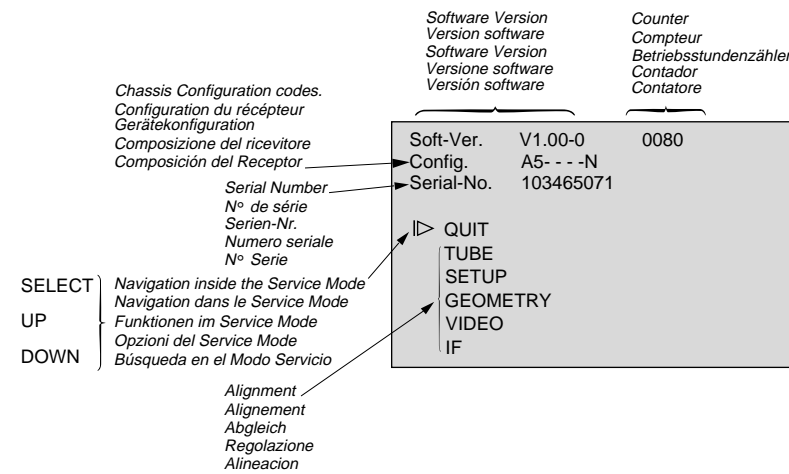
- ⇒ Copies all values from NVM into RAM.
- Copie toutes les valeurs des données NVM en RAM
- Kopiert alle NVM-Datenwerte in den RAM
- Copiare tutti i valori da NVM sulla RAM
- Copia todos los valores de NVM a RAM

ROM Default

- ⇒ All the default values of a page in use are stored in RAM.
- L'ensemble des valeurs par défaut d'une page courante est chargé en RAM.
- Sämtliche Standardwerte der aktuellen Seite werden im RAM geladen
- Tutti i valori di default di una pagina in uso vengono memorizzati sulla RAM
- Todos los valores por defecto de la página en curso están almacenados en RAM.

III - LITE-MENU FOR FIELD SERVICE MODE - MENUS DU MODE SERVICE

1 MAIN MENU - MENU PRINCIPAL



TV CONFIGURATION - CONFIGURATION DU TV - GERÄTEKONFIGURATION - CONFIGURAZIONE DEL TV - CONFIGURACIÓN DEL TV

Config. A1Z-DKC

- Character 1 : Tube type : «A»= 4/3 , «W» =16/9
- Character 2 : Chassis type : «5» = 50Hz,
- Character 3 : Zoom available : «Z»=yes, «-»=not
- Character 4 : Ambient Sensor : «S»= detected, «-»= not
- Character 5 : Dolby : «D»=detected, «-»= not
- Character 6 : AV Link detected : «K»=IR link detected, «-»= not
- Character 7 : Chassis Variant: «N»= Nicam, «S»=Stereo

Serial-N0. A16-----

- Character 1 : Factory : «A»= Angers , «C» =Celle, «T» =Tarancon
- Character 2 : Year : «G» = 1996, «H»= 1997 etc..
- Character 3 : Month, from : «1»=January to «C»=December
- Character 4-9 : Serial N0.

TIME COUNTER - COMPTEUR DE TEMPS - BETRIEBSSTUNDENZÄHLER - CONTATORE - CONTADOR

The counter indicates the TV's number of service hours.It counts from 0 to 65535 hours.

The display is hexadecimal.

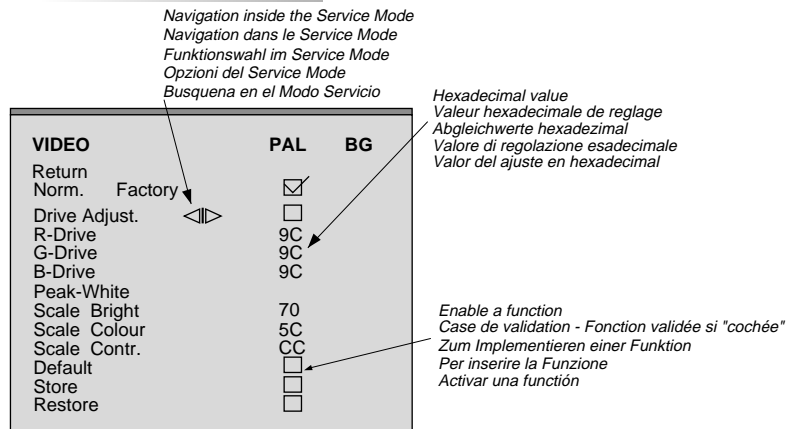
Le compteur de temps indique le nombre d'heures de service du TV. Il compte de 0 à 65535 heures. L'affichage est en hexadécimal.

Der Zähler zeigt an, wieviele Stunden der Fernseher in Betrieb ist. Die Anzeige ist hexadezimal.

Il contatore indica il numero di ore di servizio del TV. Puo' contare da 0 a 65535. La visualizzazione è esadecimale.

El contador indica el número de horas de servicio de la TV. Cuenta de 0 a 65535 horas. El visualizador es hexadecimal.


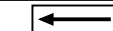

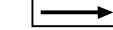

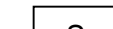



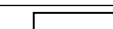






2 SUBMENU - SOUS-MENU




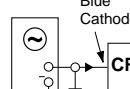
TUBE Return Tube type A66ECY... Store ◀▶ <input checked="" type="checkbox"/> Restore □	SETUP Return Clear Progs. ▶▶ Kbd. Config. Default WSS □ Default □ Store □ Restore □	GEOMETRY Return V- Slope 7C V-Amplitude 6C V-Position ◀▶ 7C Blanking On □ S - Correction 54 H-Position 94 H-Amplitude 70 EW-Amplitude 78 EW-Trapezium 98 Default □ Store □ Restore □	VIDEO Return Norm. Factory <input checked="" type="checkbox"/> Drive Adjust. ◀▶ □ R-Drive 9C G-Drive 9C B-Drive 9C Peak-White Scale Bright 70 Scale Colour 5C Scale Contr. CC Default □ Store □ Restore □	PAL BG Return AGC Take Over ◀▶ 88 FFI - Bit □ Default <input checked="" type="checkbox"/> Store <input checked="" type="checkbox"/> Restore <input checked="" type="checkbox"/>
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Tube Name	LIST name	Description
A51FEFS83X191	A51FEFS	4:3 21° OT AK-Mask- Coty-M
A51FEFS33X191	A51FEFS	4:3 25° MP AK-Mask- Vector
A6E6H43X1	A6E6H43	4:3 28° MP AK-Mask- Vector
A6BEGD0383X30	A6BEGD	4:3 29° SF Invar- Vector
ABDA0E1J3X01	ABDA0E1J	4:3 33° MP AK-Mask- Coty-M
A59F6D0483X30	A59F6D	4:3 25° SF Invar-Mask- Vector
A6BAGA25X01	A6BAGA	4:3 29° VHP- AK-Mask- Coty-M
W56G6G0203X15	W56G6G	16:9 32° SF Invar-Mask- Vector
W66G6G0203X15	W66G6G	16:9 28° SF Invar-Mask- Vector
W76G6G0203X15	W76G6G	16:9 32° SF Invar-Mask- Vector

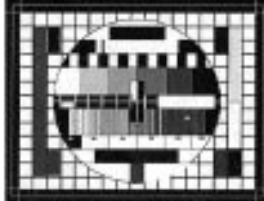
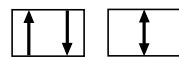

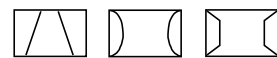


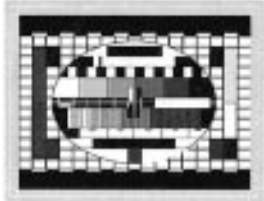

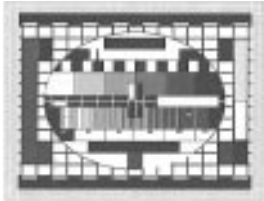

6. Posizionare il monoscopio	
6. Colocare la piantilla cuadriculada.	
7. Perform the geometry adjustments described below.	
7. Effectuer les reglages de geometrie d'ecris ci- dessous	
7. Nehmen Sie die Geometrie-einstellung wie unten beschrieben vor.	
7. Effettuare le regolazioni di geometria descritte in precedenza	
7. Efectúe los ajustes geométricos descritos más abajo.	
8. Store /Memoriser / Speichern /Memorizzare - [Almacene	









V-Amplitude		
V-Position		
H-Position		
S-Correction		
H-Amplitude		
EW - Amplitude		
EW - Trapezium		
EW - Shape		



<p>Scal*. Colour</p>	<p>  PAL (then SECAM +RGB) 75% Colour bar test pattern via RF. </p> 
<p>Scal. Contrast</p>	<p>factory settings.</p>

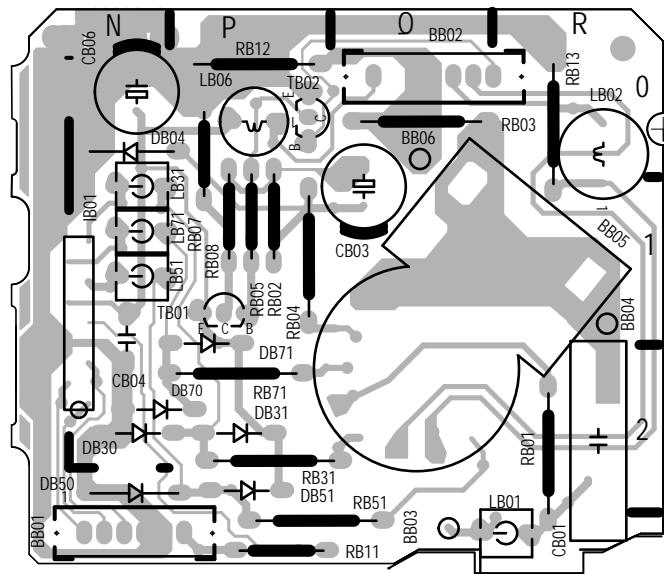
Note :
adjust separate for PAL/NTSC/SECAM and RGB/AV
getrennte Einstellung für PAL/SECAM und RGB/AV
After PEAK white adjustment control cut off setting.
Repeat the adjustments if necessary.
Nach der Einstellung von "Peak white" die "Cut off"-
Einstellungen wiederholen.

<p>4 / 3 standard mode zoom 0</p>		<p>overscan V=107% , H=107%</p> <p>1- Adjust Vertical position and Vertical amplitude</p> <p>2- Adjust Vertical Blanking and linearity</p>  <p>3- Adjust Horizontal position and Horizontal amplitude</p>  <p>4-Adjust EW Amplitude ,EW Shape and Trapezium</p> 
<p><4/3> zoom 1</p>		<p>overscan V=120% , H=120%</p> 
<p>16 / 9 standard mode zoom 0</p>		<p>Adjust the vertical height until V = 80%</p> 
<p><16 / 9> zoom 1</p>		<p>Adjust the vertical height : V =90%</p> 

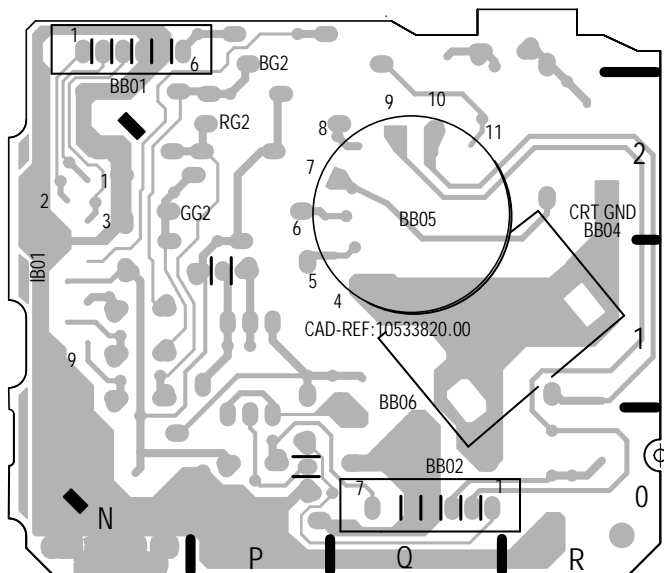
<p>16 / 9 standard mode zoom 0</p>		<p>overscan V=107%, H=107%</p> <p>1- Adjust Vertical position and Vertical amplitude</p> <p>2- Adjust Vertical Blanking and linearity</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; text-align: center;">  </div> <div style="border: 1px solid black; padding: 5px; text-align: center;">  </div> </div>
		<p>3- Adjust Horizontal position and Horizontal amplitude</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; text-align: center;">  </div> <div style="border: 1px solid black; padding: 5px; text-align: center;">  </div> </div> <p>4-Adjust EW Amplitude ,EW Shape and Trapezium</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; text-align: center;">  </div> <div style="border: 1px solid black; padding: 5px; text-align: center;">  </div> <div style="border: 1px solid black; padding: 5px; text-align: center;">  </div> </div>

VIDEO AMPLIFIER BOARD - PLATINE AMPLIFICATEURS VIDEO - VIDEOVERSTÄRKERPLATTE -
PIASTRA AMPLIFICATORE VIDEO - PLATINA AMPLIFICADOR VIDEO

COMPONENT SIDE - CÔTE COMPOSANTS - BESTÜCKUNGSSEITE -
LATO COMPONENTI - LADO COMPONENTES



SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS

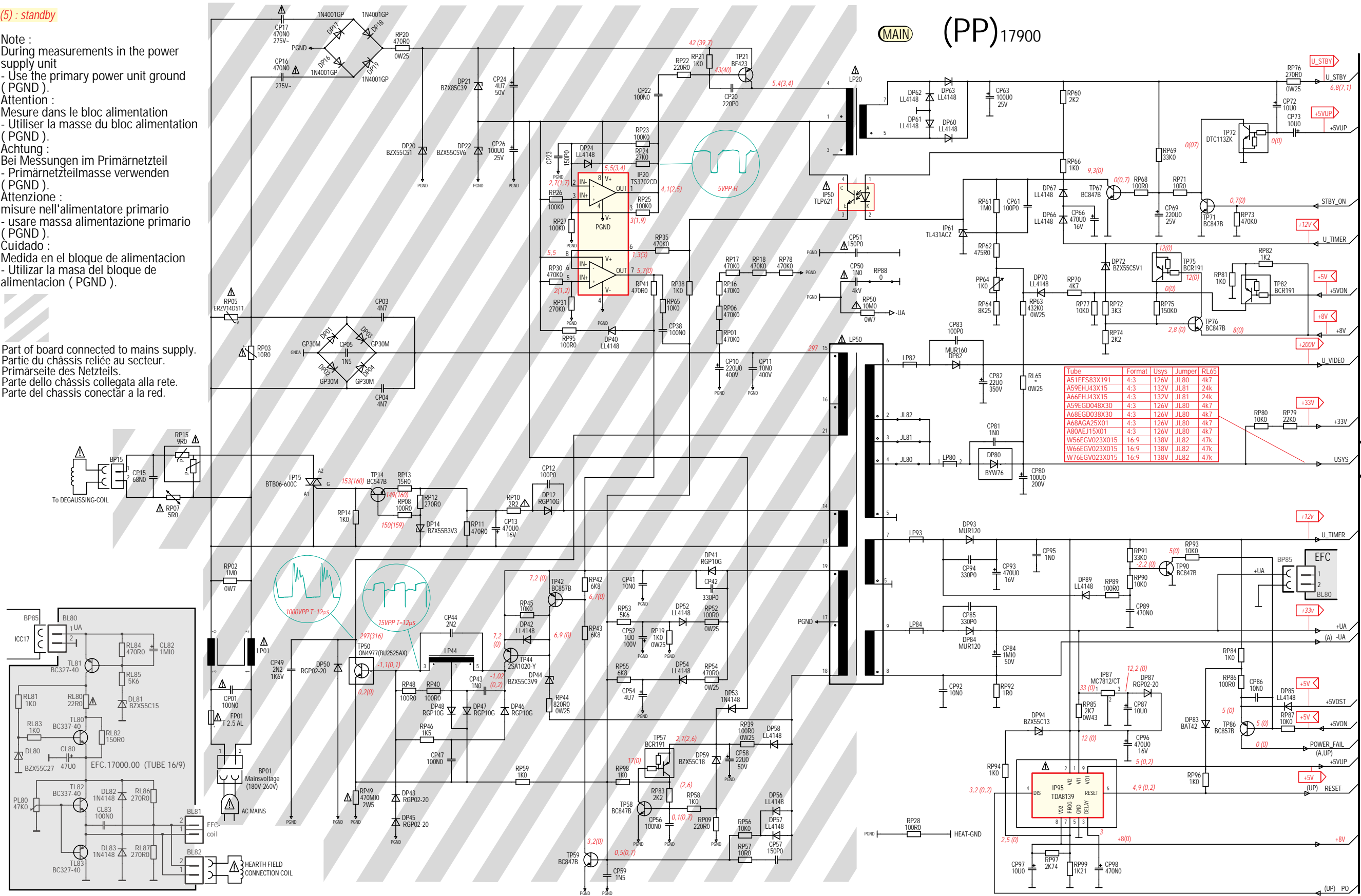


POWER SUPPLY - ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN

(5) : standby

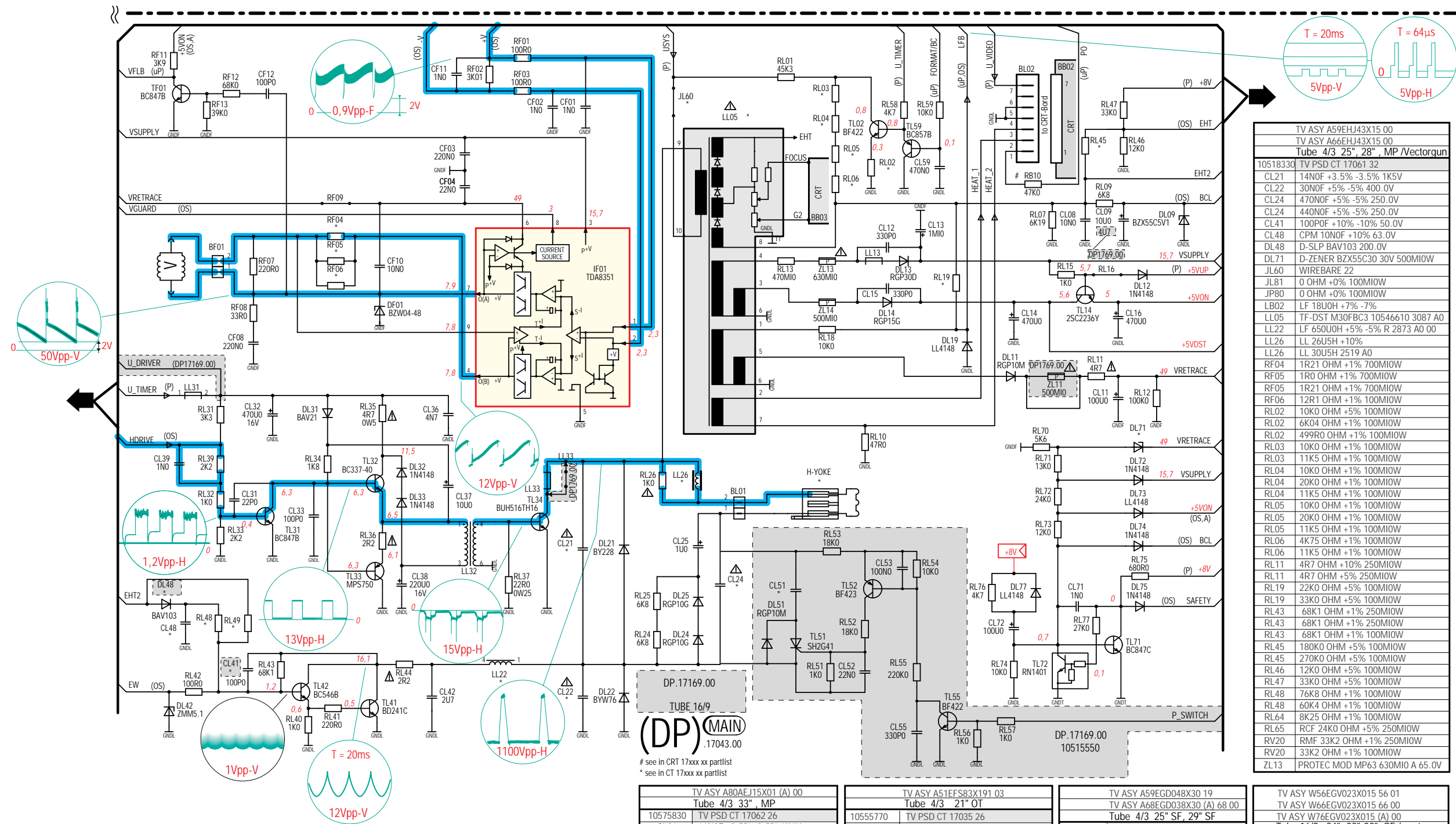
Note :
During measurements in the power supply unit
- Use the primary power unit ground (PGND).
Attention :
Mesure dans le bloc alimentation
- Utiliser la masse du bloc alimentation (PGND).
Achtung :
Bei Messungen im Primärnetzteil
- Primärnetzteilmasse verwenden (PGND).
Attenzione :
misure nell'alimentatore primario
- usare massa alimentazione primario (PGND).
Cuidado :
Medida en el bloque de alimentacion
- Utilizar la masa del bloque de alimentacion (PGND).

Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello chassis collegata alla rete.
Parte del chassis conectar a la red.




⚠ Use isolating mains transformer - Utiliser un transformateur isolateur du secteur -Einen Trenntrafo verwenden
Utilizar un transformador aislador de red - Utilizzare un trasformatore per isolarvi dalla rete

SCANNING - BALAYAGE - ABLENKUNG - BARRIDO - SCANSIONE




⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be guaranteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ) par des composants non homologués selon la Norme CEI 65 entraîne la non-conformité de l'appareil.
Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol gekennzeichnet) durch nicht normgerechte Teile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione degli elementi di sicurezza (contrassegnati con il segno Δ) con componenti non omologati secondo la norma CEI 65 comporta la non conformità dell'apparecchio.
In tal caso é "esclusa la responsabilità" del costruttore.

La sustitución de elementos de seguridad (marcados con el símbolo ) por componentes no homologados según la norma CEI 65, provoca la no conformidad del aparato.
En ese caso, el fabricante cesa de ser responsable.

	TV ASY A80AEJ15X01 (A) 00
	Tube 4/3 33" , MP
10575830	TV PSD CT 17062 26
CL21	16N2F +3.5% -3.5% 1K6V
CL22	30N0F +5% -5% 400.0V
CL24	56N0N0F +5% -5% 250.0V
CL41	100P0F +10% -10% 50.0V
CL48	10N0F +10% 63.0V
DL48	D-SLP BAV103 200.0V
DL71	D-ZENER BZX55C30 30V 500MIOW
JL60	WIREABE 22
JL80	0 OHM +0% 100MIOW
LB02	LF 32U0H +4% -4%
LL05	TF-D52 TDS29 1BD 11
LL22	LF 65U0UH +5% -5% R 2873 AO 00
LL26	LL 26U5H +1%
RF05	1R21 OHM +1% 700MIOW
RF06	10R0 OHM +1% 100MIOW
RL02	6K04 OHM +1% 100MIOW
RL03	4K75 OHM +1% 100MIOW
RL04	4K75 OHM +1% 100MIOW
RL05	4K75 OHM +1% 100MIOW
RL06	6K81 OHM +1% 100MIOW
RL19	13K0 OHM +5% 100MIOW
RL45	150K0 OHM +5% 100MIOW
RL48	76K8 OHM +1% 100MIOW
RL49	560K0 OHM +5% 100MIOW
RL65	RCF 4K7 OHM +5% 250MIOW
RV20	RMF 23K7 OHM +1% 250MIOW

	TV ASY A51EFS83X191 03
	Tube 4/3 21" OT
10555770	TV PSD CT 17035 26
CL21	8N3F +3.5% -3.5% 1K6V
CL22	33N0F +5% -5% 1K0V
CL24	44N0F +5% -5% 250.0V
CL41	1N0F +10% -10% 50.0V
DL71	D-ZENER BZX55C24 24V 500MIOW
JL60	WIREBARE
JL80	0 OHM +0% 100MIOW
LB02	LF 18U0H +7% -7%
LL05	TF-DST M30FBC3 10555640 3087
LL22	LF 65U0UH +5% -5% R 2873 A0 C
LL26	LL 85U0H 2519 A0
RF05	1R5 OHM +1% 700MIOW
RF06	10R0 OHM +1% 100MIOW
RL02	6K04 OHM +1% 100MIOW
RL03	10K0 OHM +1% 100MIOW
RL04	10K0 OHM +1% 100MIOW
RL05	10K0 OHM +1% 100MIOW
RL06	3K32 OHM +1% 100MIOW
RL45	110K0 OHM +5% 100MIOW
RL49	60K4 OHM +1% 100MIOW
RL65	4K7 OHM +5% 250MIOW
RV20	23K7 OHM +1% 250MIOW

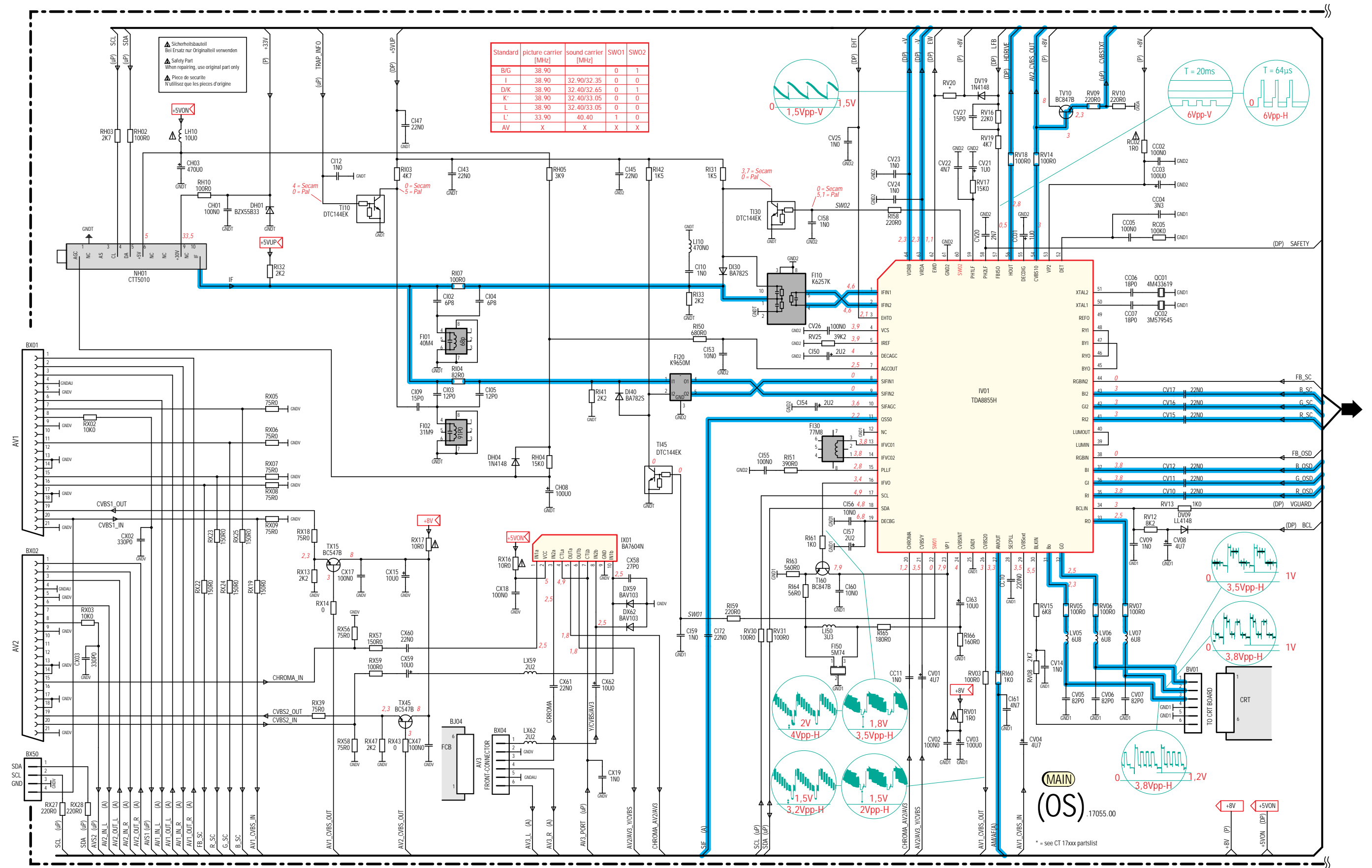
		TV ASY A59EGD048X30 19
		TV ASY A68EGD038X30 (A) 68 00
		Tube 4/3 25" SF, 29" SF
	10515520	TV PSD CT 17071 26
	CL21	16N2F +3.5% -3.5% 1K6V
	CL22	30N0F +5% -5% 400.0V
	CL24	51N0NF +5% -5% 250.0V
	CL41	100P0F +10% -10% 50.0V
	CL48	10N0F +10% 63.0V
	DL48	D-SLP BAV103 200.0V
	DL71	D-ZENER Z8X5C30 30V 500MIOW
	JI60	WIREBARE 22
	JI80	0 OHM +0% 100MIOW
	LB02	L 32U0H +4% -4%
	LL05	TF-DST TDS29 TBD 13
	LL22	LF 65U0H +5% -5%
	LL26	LL 26U5H +10%
	RF05	RMF 1R0 OHM +1% 100MIOW
	RL02	6K8 OHM +5% 100MIOW
	RL03	4K75 OHM +1% 100MIOW
	RL04	4K75 OHM +1% 100MIOW
	RL05	4K75 OHM +1% 100MIOW
	RL06	4K75 OHM +1% 100MIOW
	RL19	15K0 OHM +5% 100MIOW
	RL45	18K0 OHM +5% 100MIOW
	RL48	10K0 OHM +5% 100MIOW
	RL49	30K0 OHM +5% 100MIOW
	RL65	4K7 OHM +5% 250MIOW
	RV20	33K2 OHM +1% 250MIOW

	TV ASY W56EGV023X015 56 01
	TV ASY W66EGV023X015 66 00
	TV ASY W76EGV023X015 (A) 00
	Tube 16/9 24", 28", 32", SF / vectorgun
10515530	TV PSD CT 17083 38
CL21	15N5F +3.5% -3.5% 1K6V
CL22	27N0F +5% -5% 400.0V
CL24	44N0F +5% -5% 250.0V
CL41	100P0F +10% -10% 50.0V
CL48	100N0F +5% 63.0V
CL51	29N0F +5% -5% 250.0V
DL48	D-SLP BAV103 200.0V
DL71	D-ZENER BZX55C24 24V 500MIOW
JL60	WIREBARE 22
JL82	0 OHM +0% 100MIOW
LB02	LF 32U0H +4% -4%
LL05	TF-DST TDS29 15314460 10
LL22	LF 650U0H +5% -5%
LL26	LL 30U5H 2519 A0
RF05	1R21 OHM +1% 700MIOW
RL02	4K99 OHM +1% 100MIOW
RL03	6K49 OHM +1% 100MIOW
RL04	6K49 OHM +1% 100MIOW
RL05	6K49 OHM +1% 100MIOW
RL06	2K37 OHM +1% 100MIOW
RL19	13K0 OHM +5% 100MIOW
RL45	39K0 OHM +5% 100MIOW
RL48	22K0 OHM +5% 100MIOW
RI 49	180K OHM +5% 100MIOW

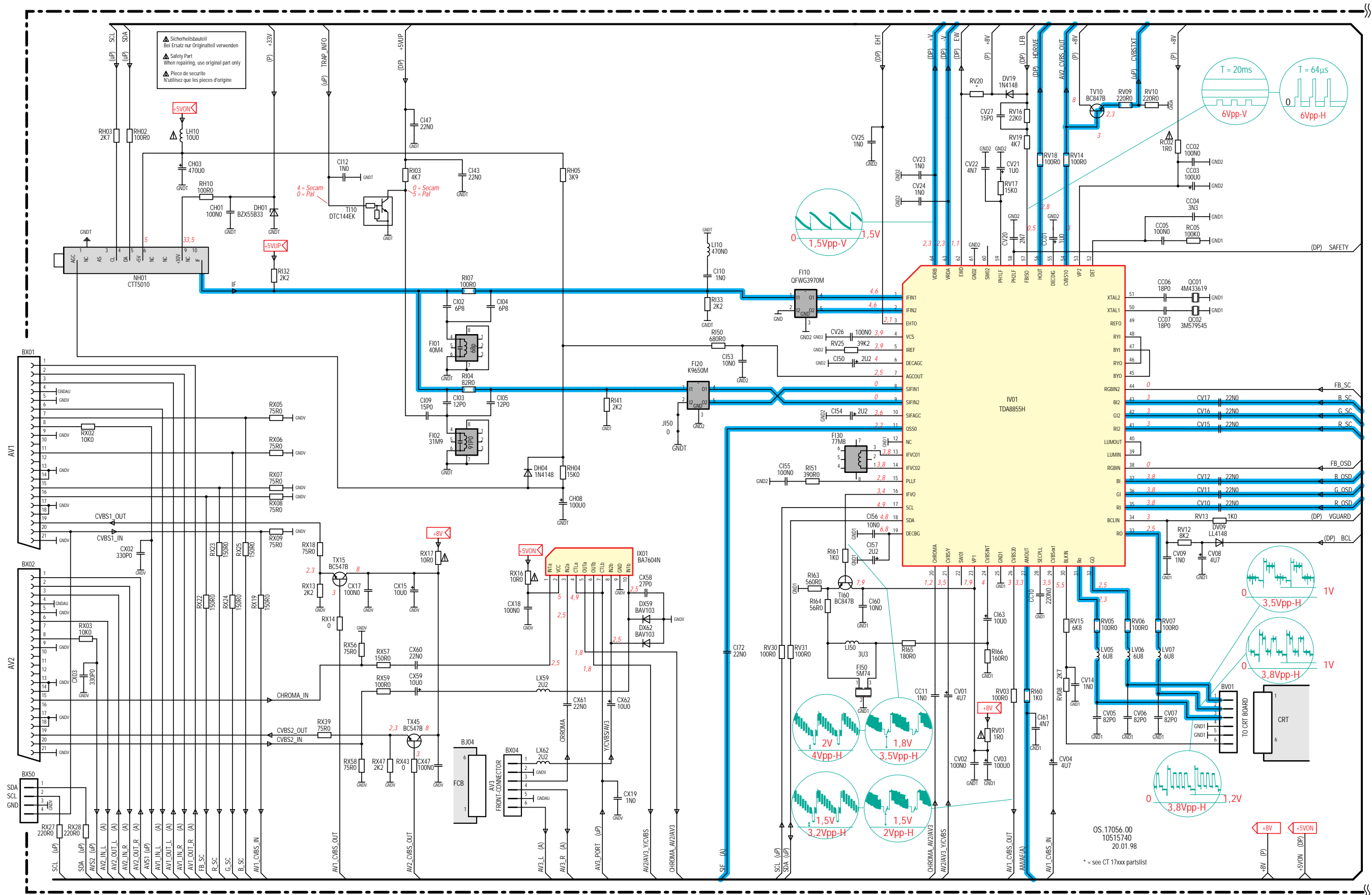
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RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR / TRATAMENTO VIDEO

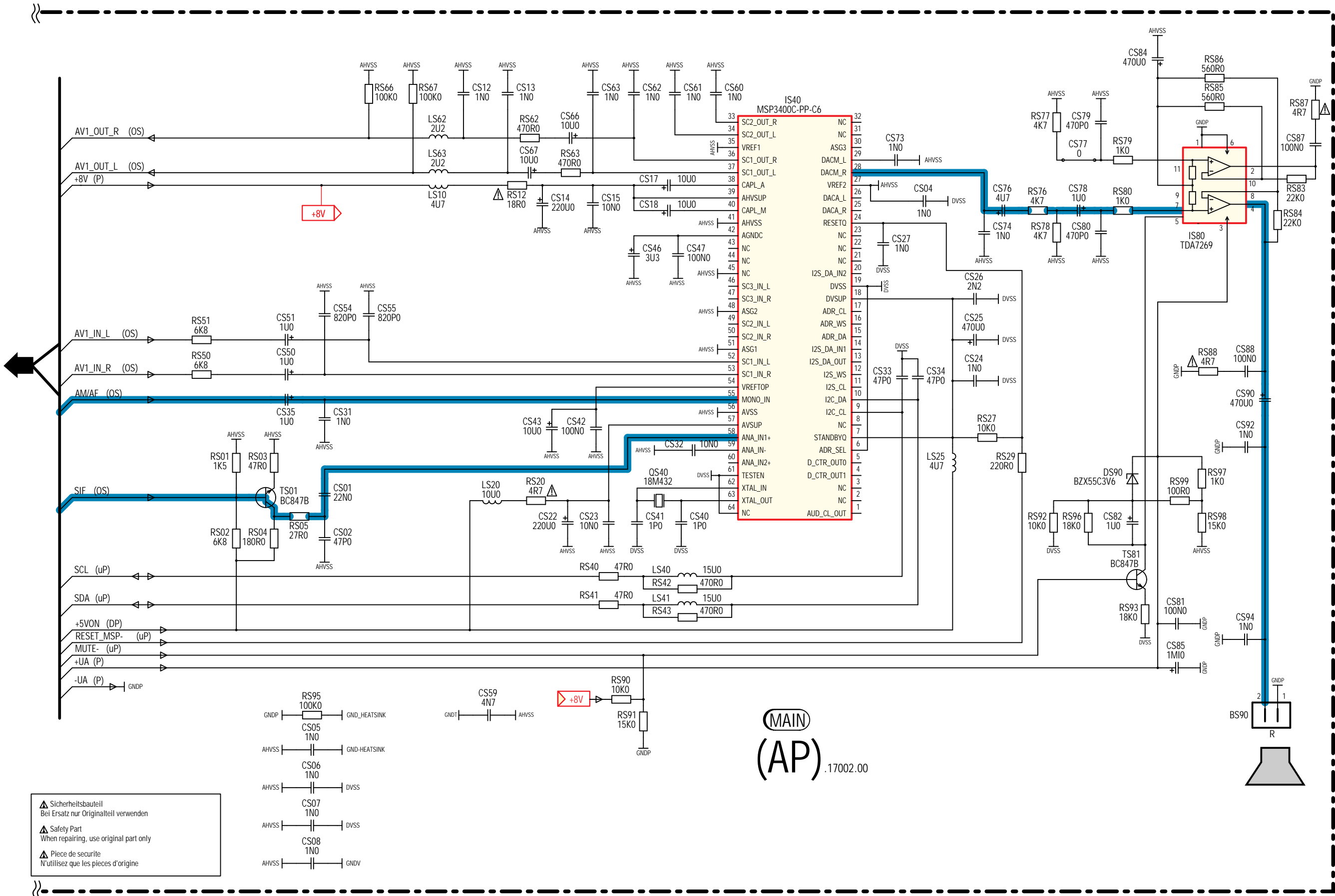


RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO
SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONNECTOR/TRATAMENTO VIDEO

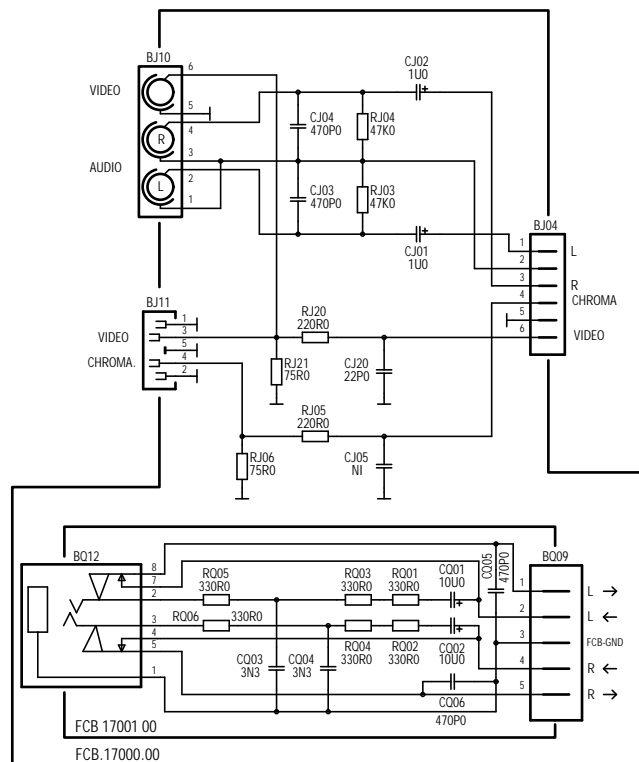
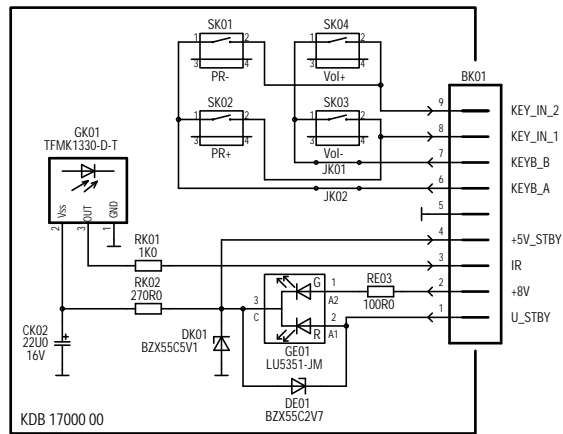




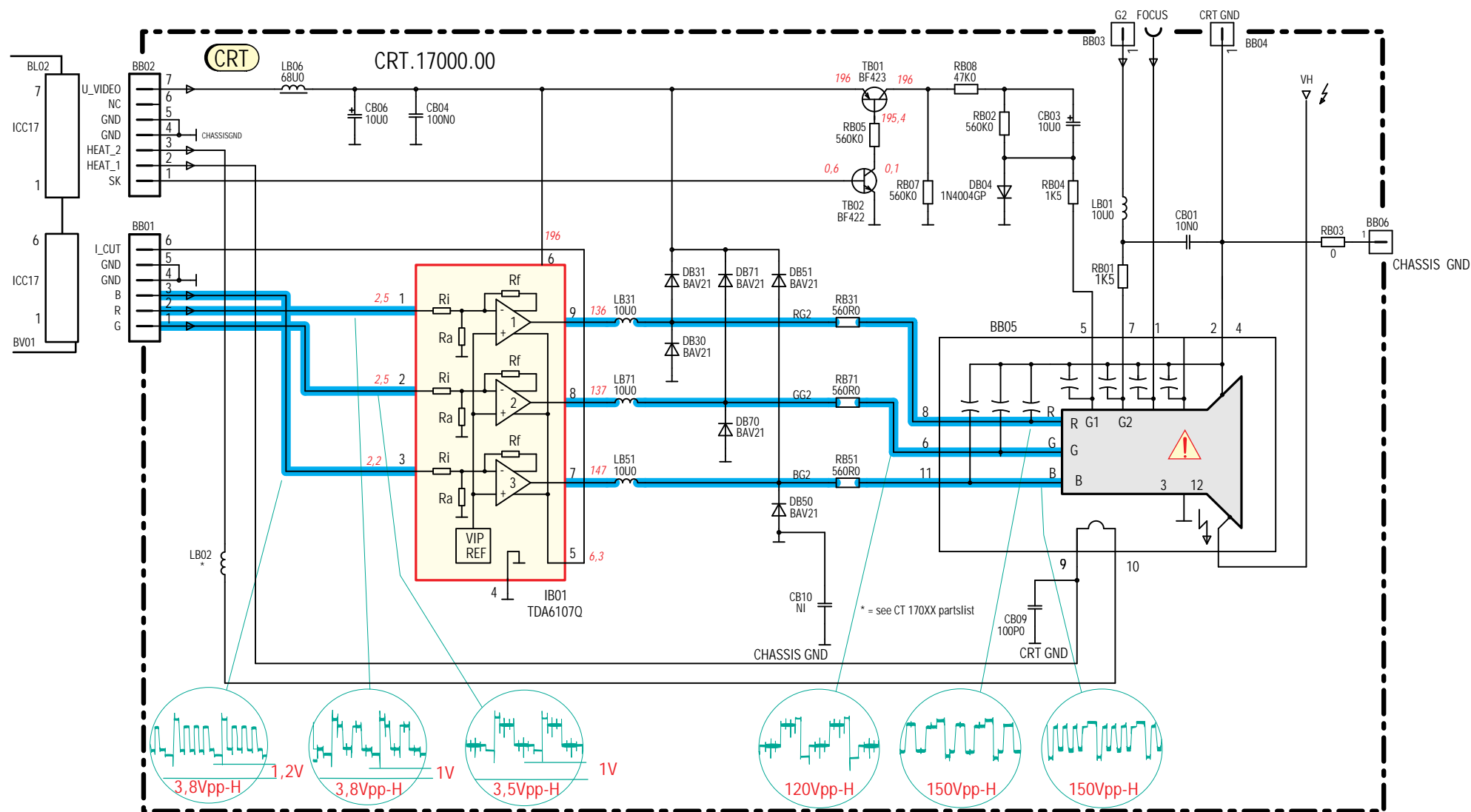
AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERABEITUNG - SCHEMA DELL' AMPLIFICATORE -
ESQUEMA DEL AMPLIFICADOR
(MONO)



KEY BOARD AND FRONT CONNECTOR BOARD MODULE PRISE EN FACADE ET INTERCONNEXION DU CLAVIER TASTATUR UND FRONT ANSCHLUSSPLATTE - PIASTRA CONNESSIONE PLACA TECLADO Y CONECTORES FRONTALES



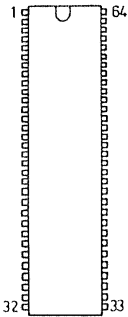
VIDEO AMPLIFIER BOARD - PLATINE AMPLIFICATEURS VIDEO - VIDEOVERSTÄRKERPLATTE - PIASTRA AMPLIFICATORE VIDEO - PLATINA AMPLIFICADOR VIDEO



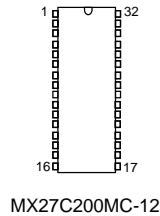
<p>LIST OF ABBREVIATIONS - LISTE DES ABREVIATIONS- ABKÜRZUNGEN LISTA DELLE ABBREVIAZIONI - LISTA DE ABREVIACIONES</p>
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● +USYS:	System voltage
● +U_VIDEO:	Video drive voltage for the CRT board
● + STDBY_ ON:	Standby data (0V standby , 0.6v switched ON)
● +5V DST:	5v unregulated voltage from the DST to supply the tuner and audio MSP device
● +5V ON:	5v regulated voltage from the DST to supply the tuner and audio MSP device
● +5V UP :	Microprocessor supply voltage
● BCL:	Beam current limiting information
● CVBS:	Composite video / luminance signal
● CVBS_OUT:	Composite video output
● CVBS_TXT:	Composite video for teletext extraction
● DEGAUSS:	Degauss signal
● EW :	East / West
● FORMAT / BC:	Full white control DATA depending on 16/9 selected format
● HDRV:	Horizontal deflection signal
● HTR1 / HTR2:	Heater voltage from the DST to CRT PCB
● LFB:	Line Fast Blanking
● MUTE :	Mutes audio amplifiers
● PO:	"Power ON " IP95 : reset activated and output = 8v "PO" = 5v when TV is working in normally
● POWER_FAIL:	Detection of mains supply and deflection stage failures
● RESET:	Microprocessor reset signal
● SAFETY:	Safety information from the deflection stage
● SCL:	Serial Clock
● SDA :	Serial Data
● SIF:	Sound IF
● TRAP_INFO:	31.4Mhz IF trap activation
● U_ STANDBY:	Standby voltage
● U_DRIVER:	Horizontal sync signal from TDA8855H
● U_TIMER:	11v voltage used during "Switch ON " phase and "Wake Up" mode
● V FLB:	Vertical flyback reference for the microprocessor
● V GUARD:	Safety data generated by the vertical amplifier TDA 8351
● V_RETRACE:	42 / 48volts (depending on tube type) generated by the DST and used for vertical blanking
● V_SUPPLY:	13.5 to 15.5 volts (depending on tube type) generated by the DST

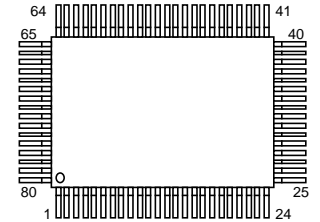
INTEGRATED CIRCUITS AND TRANSISTORS OUTLINE - CIRCUITS INTEGRES ET TRANSISTORS INTEGRIERTE SCHALTUNGEN UND TRANSISTOREN - CIRCUITI INTEGRATI TRANSISTOR CIRCUITOS INTEGRADOS Y TRANSISTORES



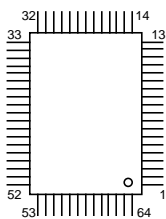
MPS3400C-PP-C6



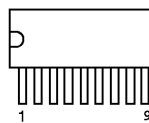
MX27C200MC-12



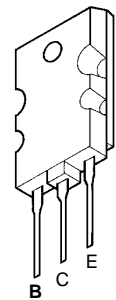
ST92R195



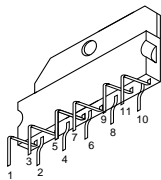
TDA8855H



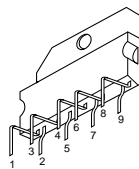
TDA8351



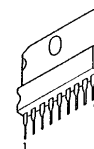
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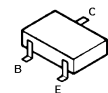
TDA7269



TDA6107Q



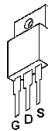
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BC 847B
BC 857B
BCR141
BCR191
DTC113ZK
DTC144EK
TN1401



ST24C08-M
TS3702CD



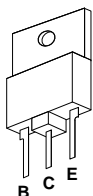
STP6 NA60F1



BT806 -600C



MC7812/CT



BD241C



BC 337
BC 546B
BC 547B



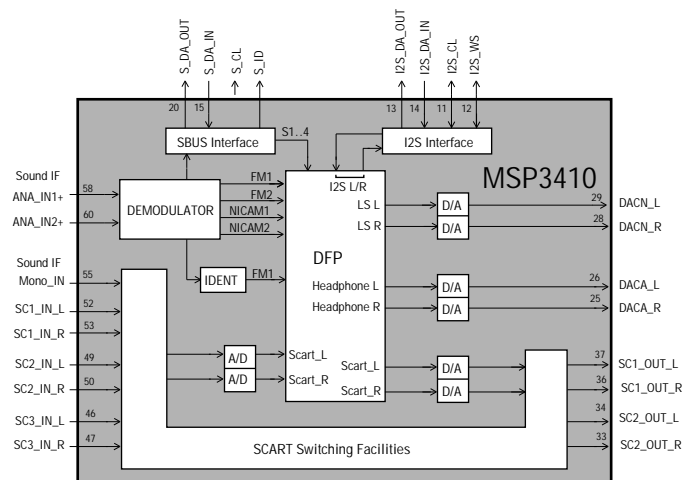
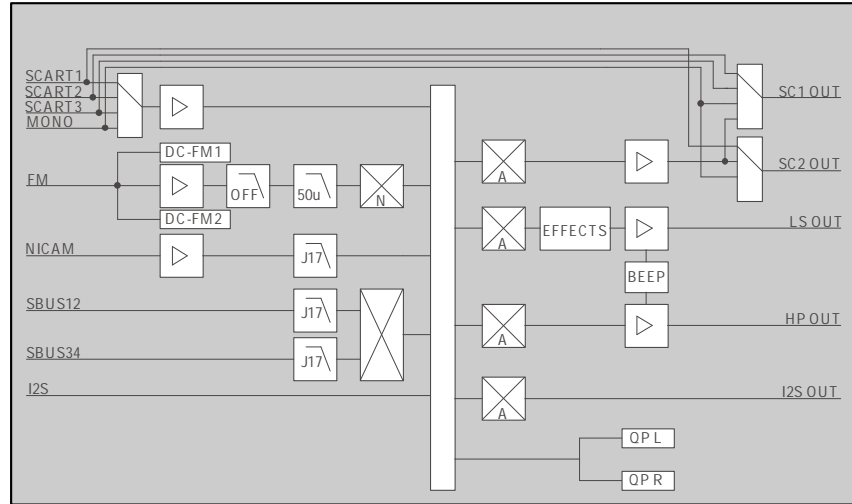
BF 422
BF423
2SA1020Y
2SC2236Y



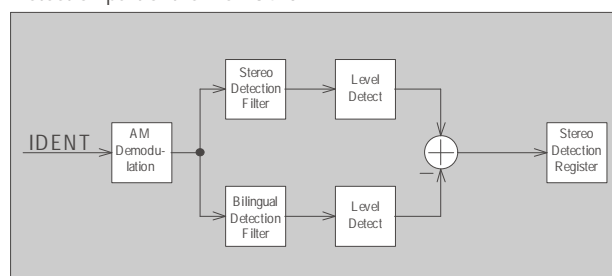
MPS750

INTEGRATED CIRCUITS BLOCK DIAGRAMS - SYNOPTIQUES INTERNES DES CIRCUITS INTEGRES - INTEGRIERTE SCHALTUNGEN BLOCKSCHALTBIlder SCHEMA A BLOCCHI DEI CIRCUITI INTEGRATI - VISTA INTERNA DE LOS CIRCUITOS INTEGRADOS

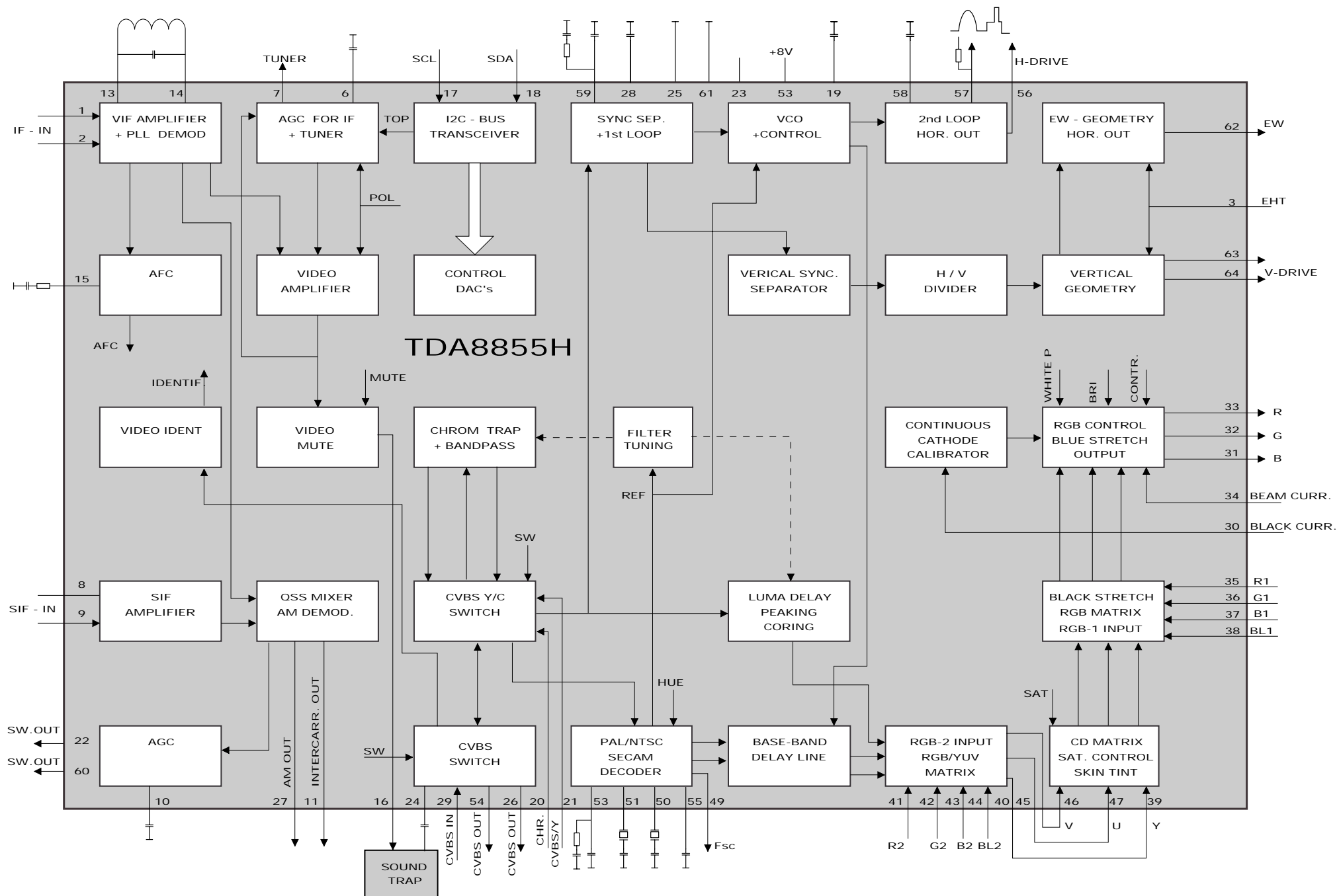
Audio baseband processing of the MSP3410



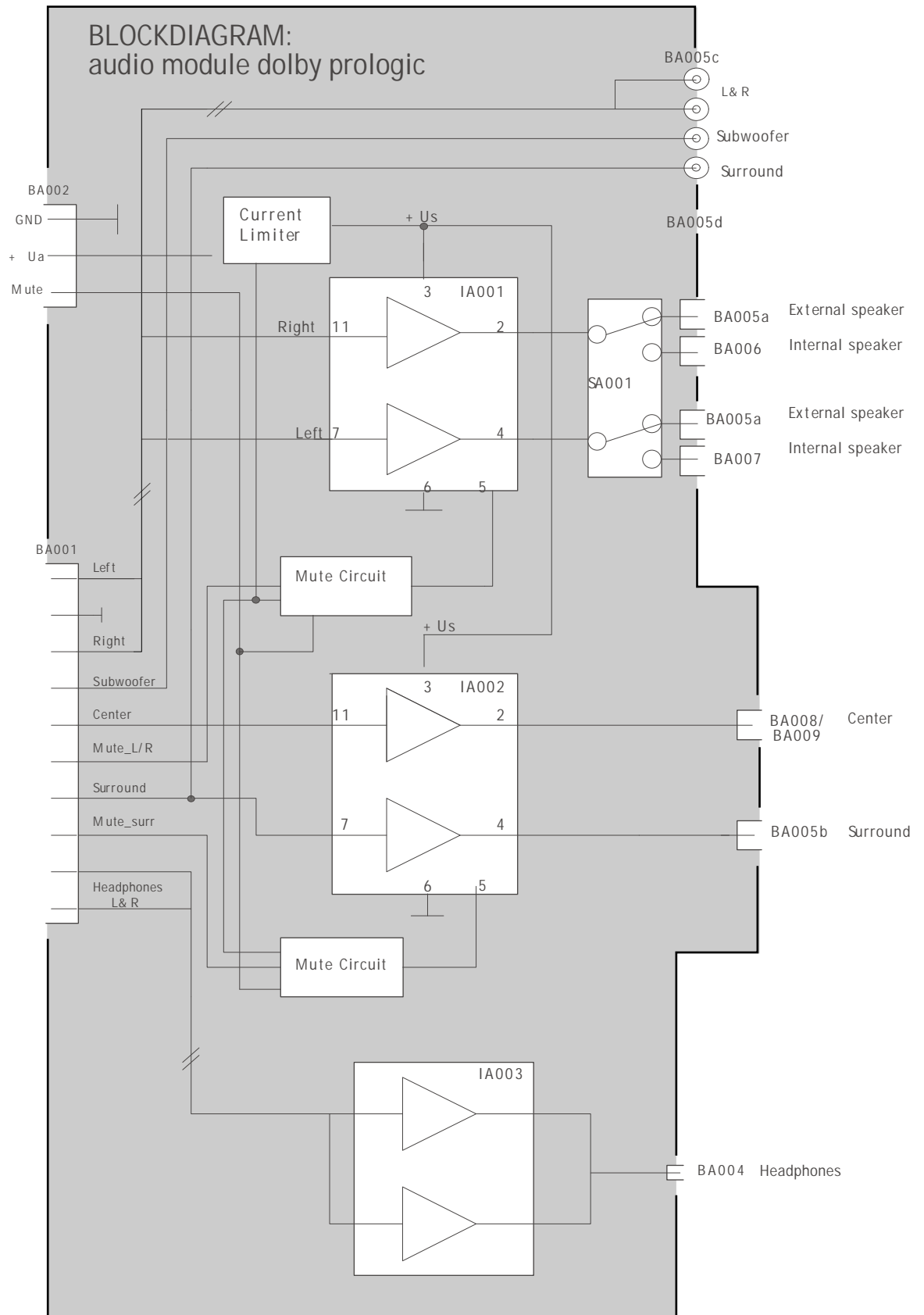
Detection part of the MSP 3410



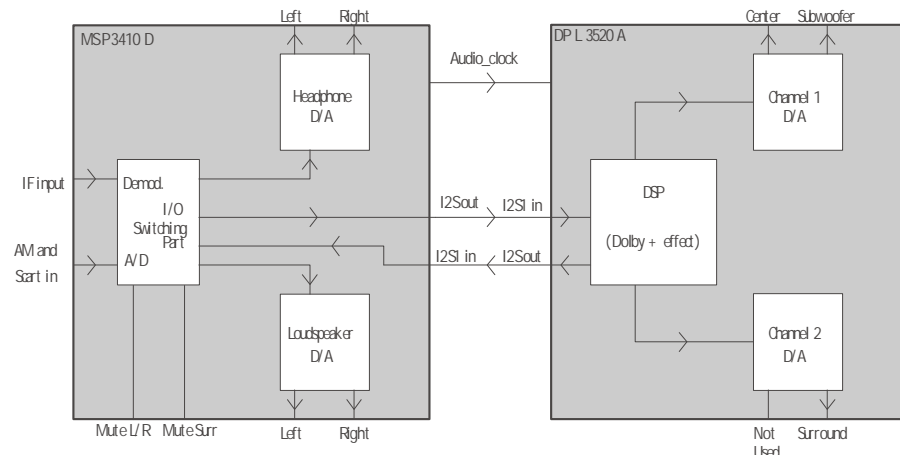
IV01 TDA 8855H



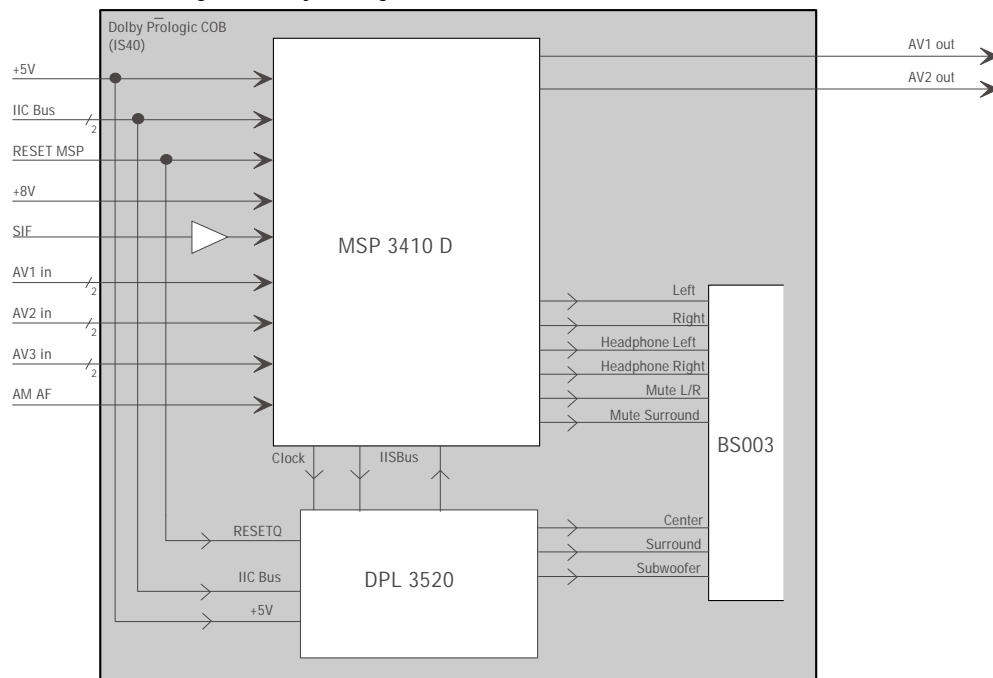
BLOCK DIAGRAM (AUDIO MODULE DOLBY PROLOGIC)
SCHEMA SYNOPTIQUE (AUDIO MODULE DOLBY PROLOGIC)
BLOCKSCHALTBIID (AUDIO MODULE DOLBY PROLOGIC)
SCHEMA A BLOCCI (AUDIO MODULE DOLBY PROLOGIC)
ESQUEMA DE BLOQUES (AUDIO MODULE DOLBY PROLOGIC)



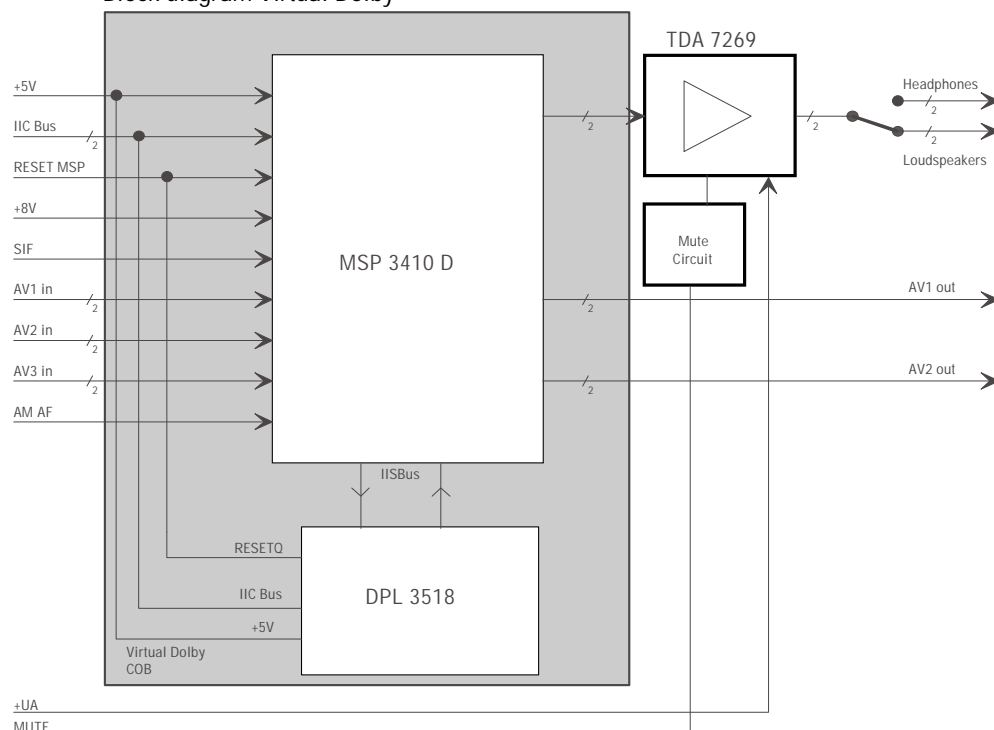
Interface requirement audio part with Dolby Prologic



Block diagram Dolby Prologic



Block diagram Virtual Dolby





IRIS REPAIR CODING SYSTEM

SYMPTOM CODE TABLE



	1	NO ACTION	2	LEVEL	3	QUALITY	4	NOISE	5	UNSTABLE	6	RECORDING & PHYSICAL DAMAGES	7	SPECIAL FUNCTIONS	8	OTHER CONDITIONS
	1	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250
	2	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350
	3	310	320	330	340	350	360	370	380	390	400	410	420	430	440	450
	4	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550
	5	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650
	6	610	620	630	640	650	660	670	680	690	700	710	720	730	740	750
	7	710	720	730	740	750	760	770	780	790	800	810	820	830	840	850
	8	810	820	830	840	850	860	870	880	890	900	910	920	930	940	950
	9	910	920	930	940	950	960	970	980	990	1000	1010	1020	1030	1040	1050
	10	1010	1020	1030	1040	1050	1060	1070	1080	1090	1100	1110	1120	1130	1140	1150
	11	1110	1120	1130	1140	1150	1160	1170	1180	1190	1200	1210	1220	1230	1240	1250
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	17	1710	1720	1730	1740	1750	1760	1770	1780	1790	1800	1810	1820	1830	1840	1850
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	81	8110	8120	8130	8140	8150	8160	8170	8180	8190	8200	8210	8220	8230	82	

SECTION CODES

ANT	ANTENNA SECTION	HDD	HARD DISC DRIVE	RFU	BOOSTER/RF UNIT
APA	AUDIO PROCESSING/ANALOG	HFS	HIGH FREQUENCY SECTION (RF)	RHD	ROTARY HEAD(S)
APD	AUDIO PROCESSING/DIGITAL	HOL	CASSETTE HOLDER	SFT	SOFTWARE (TAPE, DISC, ETC.)
APR	SIGNAL PROCESSING (ANALOG)	IDS	INFORMATION DISPLAY SECTION	SHD	STATIONARY HEAD(S)
ARM	ARM MECHANISM	IFC	IF-CIRCUIT	SLD	SLED MECHANISM
BCH	BATTERY CHARGE	IMG	IMAGE DISPLAY UNIT	SNS	SENSOR UNIT
BZL	BEZEL	INC	INTERNAL CONNECTOR	SPK	SPEAKER
CBT	CABINET	INP	SIGNAL INPUT SECTION	SRS	SUPPLY REEL SECTION
CHA	CHASSIS	KBD	KEYBOARD (SEPARATE)	STA	STATIC BLOCK
CLK	CLOCK/TIMER SECTION	LDG	LOADING MECHANISM	SVO	SERVO SECTION
CPA	COLOUR PROCESSING/ANALOG	LNM	LENS MECHANISM	SYS	SYSTEM CONTROL SECTION
CPD	COLOUR PROCESSING/DIGITAL	MEM	MEMORY CIRCUIT	TDM	TAPE DRIVE MECHANISM
CRT	PICTURE TUBE	MIC	MICROPHONE SECTION	THR	THREADING MECHANISM
CTR	CONTROL PANEL	OUT	SIGNAL OUTPUT SECTION	TIM	TIMER SECTION
DDM	DISC DRIVE MECHANISM	PFM	PAPER FEED MECHANISM	TNR	TENSION REGULATOR
DFL	DEFLECTION CIRCUIT	PIN	PINCH ROLLER/LEVER	TPT	TAPE PATH
DPR	SIGNAL PROCESSING (DIGITAL)	PRG	PROGRAMMING SECTION	TRS	TAKE-UP REEL SECTION
ERA	ERASE CIRCUIT	PRI	PRINT BLOCK	TUN	TUNING SECTION
EXC	EXTERNAL CONNECTOR	PRT	PROTECTION CIRCUIT	TXT	TEXT PROCESSING
FDD	FLOPPY DISC DRIVE	PSU	POWER SUPPLY	VPA	VIDEO PROCESSING/ANALOG
FLX	FLEXIBLE PCB	PUD	PICK-UP DEVICE	VPD	VIDEO PROCESSING/DIGITAL
FMW	FIRMWARE	PWA	POWER AMP SECTION	VWF	VIEWFINDER
FPK	FOCUS PACK	REM	REMOTE CONTROL SECTION	WIR	LEAD WIRE
HCM	HEAD CARRIAGE MECHANISM	RFM	RIBBON FEED MECHANISM	XXX	CABINET/COSMETIC PARTS

DEFECT CODES

MECHANICAL		ELECTRICAL	
A	WORN OUT	N	EXHAUSTED, LOW EMISSION
B	DIRTY, CLOGGED	O	BURNT, ARCING, MISSING PIXELS
C	MISALIGNED	P	MISALIGNED
D	CUT, BROKEN	Q	SHORT
E	DEFORMED	R	OPEN
F	SNAPPED	S	LEAKING
G	SCRATCHED	T	BAD CONTACT, CONNECTION
H	CRACKED, PEELED, CORRODED	U	OPEN PATTERN
I	LOOSE	V	CRACKED PCB
J	SHAKY, UNSTABLE	W	COLD OR NO SOLDERING
K	LEAKING	X	BRIDGED SOLDERING
L	DRY (NO LUBRICANT)	Y	WRONG COMPONENT
M	FOREIGN OBJECT	Z	MISSING COMPONENT
		1	SOFTWARE BUG

REPAIR CODES

A	REPLACEMENT	N	MAINTENANCE
B	MECHANICAL ALIGNMENT	O	REFURBISHING
C	ELECTRICAL ALIGNMENT	P	PREVENTIVE PARTS REPLACEMENT
D	RESOLDERING	Q	PREVENTIVE ACTION WITHOUT PARTS REPLACEMENT
E	CLEANING	U	EXPLANATION FOR CUSTOMER
F	LUBRICATION	V	ESTIMATION REFUSED
G	REPAIRED ELECTRICAL PARTS	W	ESTIMATION WITH PARTS
H	REPAIRED MECHANICAL PARTS	X	ESTIMATION WITHOUT PARTS
I	S/B MODIFICATION		
J	REMOVED COMPONENT (S)	Y	RETURN WITHOUT REPAIR
K	ADDED COMPONENTS	Z	SET EXCHANGE
L	FUNCTIONAL CHECK		
M	SPECIFICATION MEASUREMENT		

FLAG: INDICATES THE ONE MAJOR SYMPTOM/PART COMBINATION BY '1'

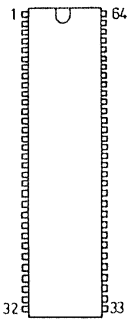
EXAMPLE OF USE :

FLAG	SYMPTOM CODE	PART NO	REF. NO	SECTION/PCB	DEFECT CODE	REPAIR CODE	QTY
<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
1	1 4 1 2	1 1 1 1 1 1 1 1	R 1 2 3 .	Y A 2 2 .	R	A	1
.	3 6 4 1	3 4 5 6 7 8 9 X X	1 1 1 . .	T D M . .	C	B	0

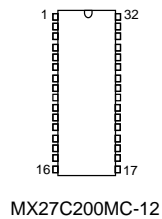
<p>LIST OF ABBREVIATIONS - LISTE DES ABREVIATIONS- ABKÜRZUNGEN</p> <p>LISTA DELLE ABBREVIAZIONI - LISTA DE ABREVIACIONES</p>
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● +USYS:	System voltage
● +U_VIDEO:	Video drive voltage for the CRT board
● + STDBY_ ON:	Standby data (0V standby , 0.6v switched ON)
● +5V DST:	5v unregulated voltage from the DST to supply the tuner and audio MSP device
● +5V ON:	5v regulated voltage from the DST to supply the tuner and audio MSP device
● +5V UP :	Microprocessor supply voltage
● BCL:	Beam current limiting information
● CVBS:	Composite video / luminance signal
● CVBS_OUT:	Composite video output
● CVBS_TXT:	Composite video for teletext extraction
● DEGAUSS:	Degauss signal
● EW :	East / West
● FORMAT / BC:	Full white control DATA depending on 16/9 selected format
● HDRV:	Horizontal deflection signal
● HTR1 / HTR2:	Heater voltage from the DST to CRT PCB
● LFB:	Line Fast Blanking
● MUTE :	Mutes audio amplifiers
● PO:	"Power ON " IP95 : reset activated and output = 8v "PO" = 5v when TV is working in normally
● POWER_FAIL:	Detection of mains supply and deflection stage failures
● RESET:	Microprocessor reset signal
● SAFETY:	Safety information from the deflection stage
● SCL:	Serial Clock
● SDA :	Serial Data
● SIF:	Sound IF
● TRAP_INFO:	31.4Mhz IF trap activation
● U_ STANDBY:	Standby voltage
● U_DRIVER:	Horizontal sync signal from TDA8855H
● U_TIMER:	11v voltage used during "Switch ON " phase and "Wake Up" mode
● V FLB:	Vertical flyback reference for the microprocessor
● V GUARD:	Safety data generated by the vertical amplifier TDA 8351
● V_RETRACE:	42 / 48volts (depending on tube type) generated by the DST and used for vertical blanking
● V_SUPPLY:	13.5 to 15.5 volts (depending on tube type) generated by the DST

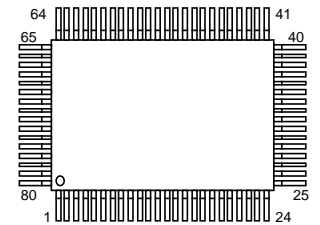
INTEGRATED CIRCUITS AND TRANSISTORS OUTLINE - CIRCUITS INTEGRES ET TRANSISTORS INTEGRIERTE SCHALTUNGEN UND TRANSISTOREN - CIRCUITI INTEGRATI TRANSISTOR CIRCUITOS INTEGRADOS Y TRANSISTORES



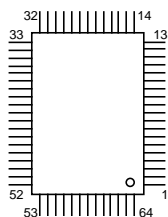
MPS3400C-PP-C6



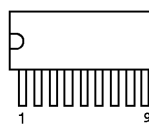
MX27C200MC-12



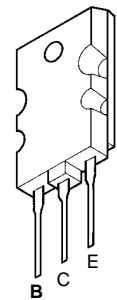
ST92R195



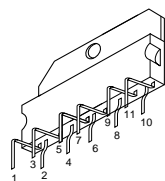
TDA8855H



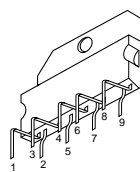
TDA8351



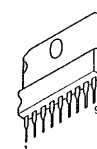
BUH516TH16



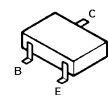
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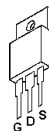
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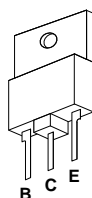
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BT806 -600C



MC7812/CT



BD241C



BC 337
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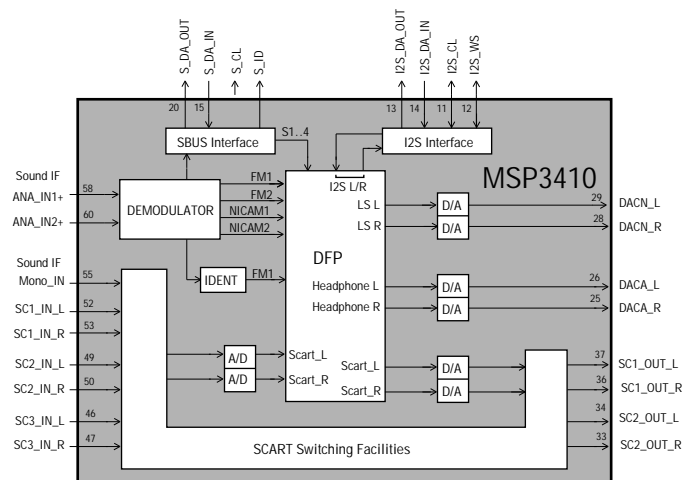
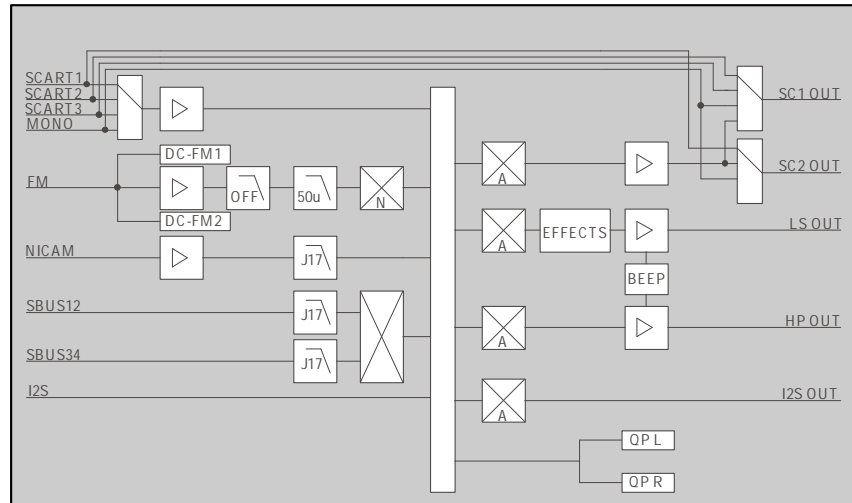
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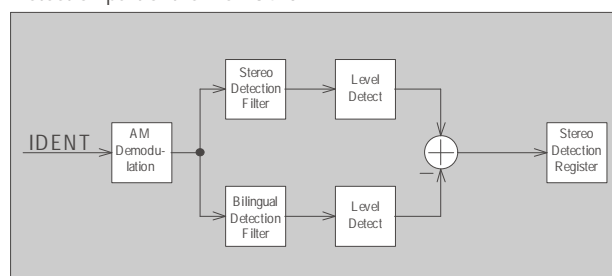
MPS750

INTEGRATED CIRCUITS BLOCK DIAGRAMS - SYNOPTIQUES INTERNES DES CIRCUITS INTEGRES - INTEGRIERTE SCHALTUNGEN BLOCKSCHALTBIlder SCHEMA A BLOCCHI DEI CIRCUITI INTEGRATI - VISTA INTERNA DE LOS CIRCUITOS INTEGRADOS

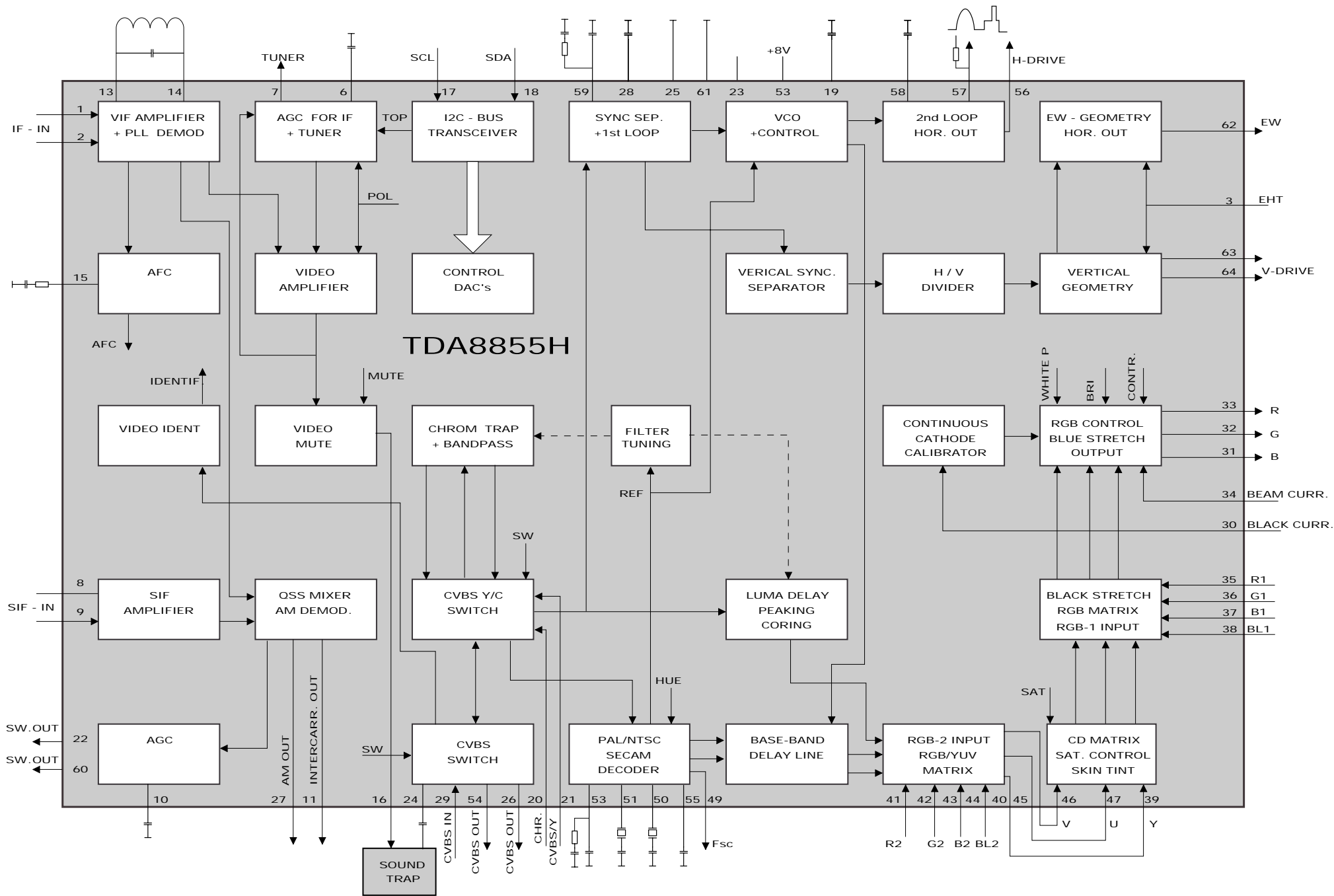
Audio baseband processing of the MSP3410



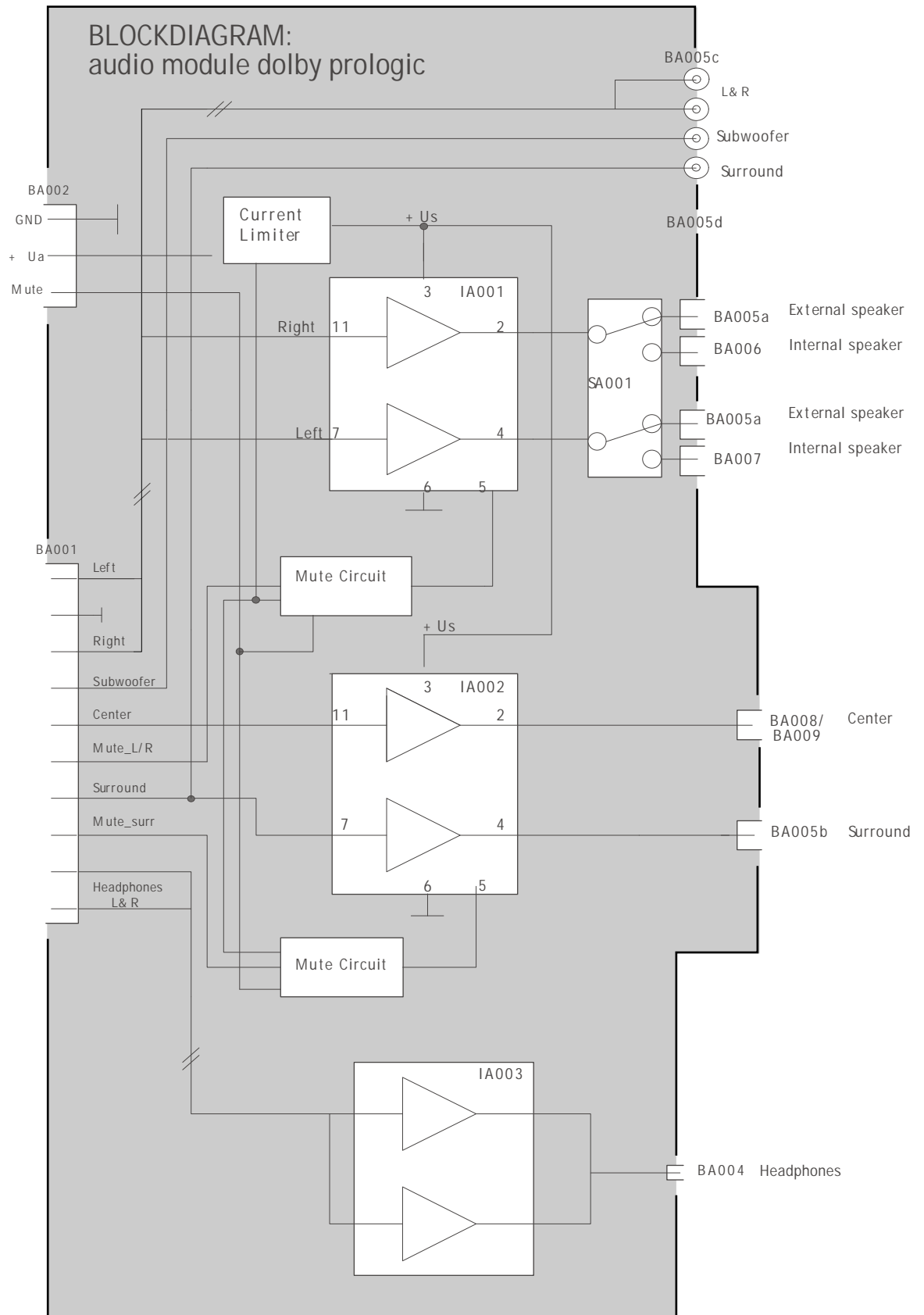
Detection part of the MSP 3410



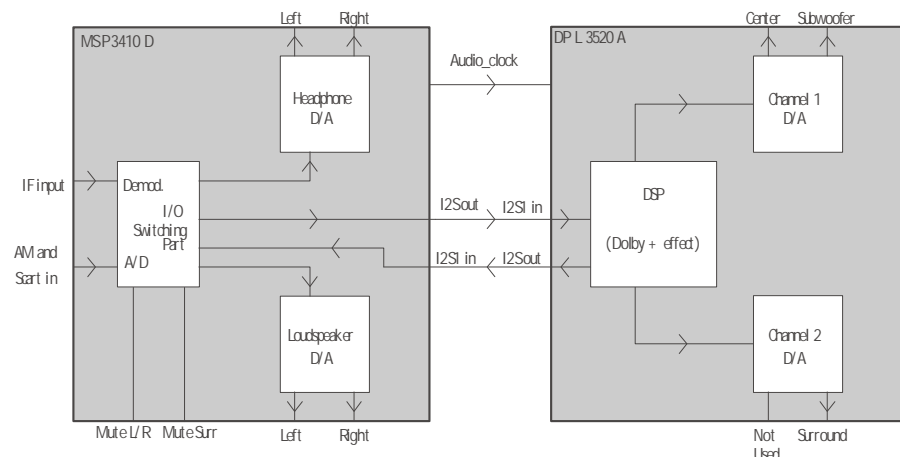
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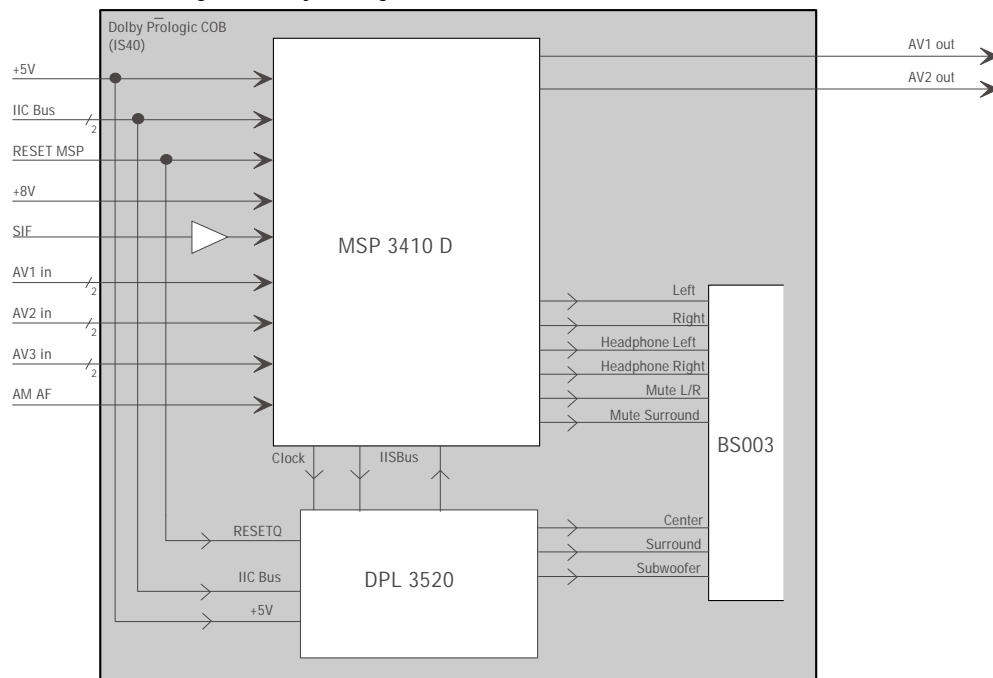
BLOCK DIAGRAM (AUDIO MODULE DOLBY PROLOGIC)
SCHEMA SYNOPTIQUE (AUDIO MODULE DOLBY PROLOGIC)
BLOCKSCHALTBIID (AUDIO MODULE DOLBY PROLOGIC)
SCHEMA A BLOCCI (AUDIO MODULE DOLBY PROLOGIC)
ESQUEMA DE BLOQUES (AUDIO MODULE DOLBY PROLOGIC)



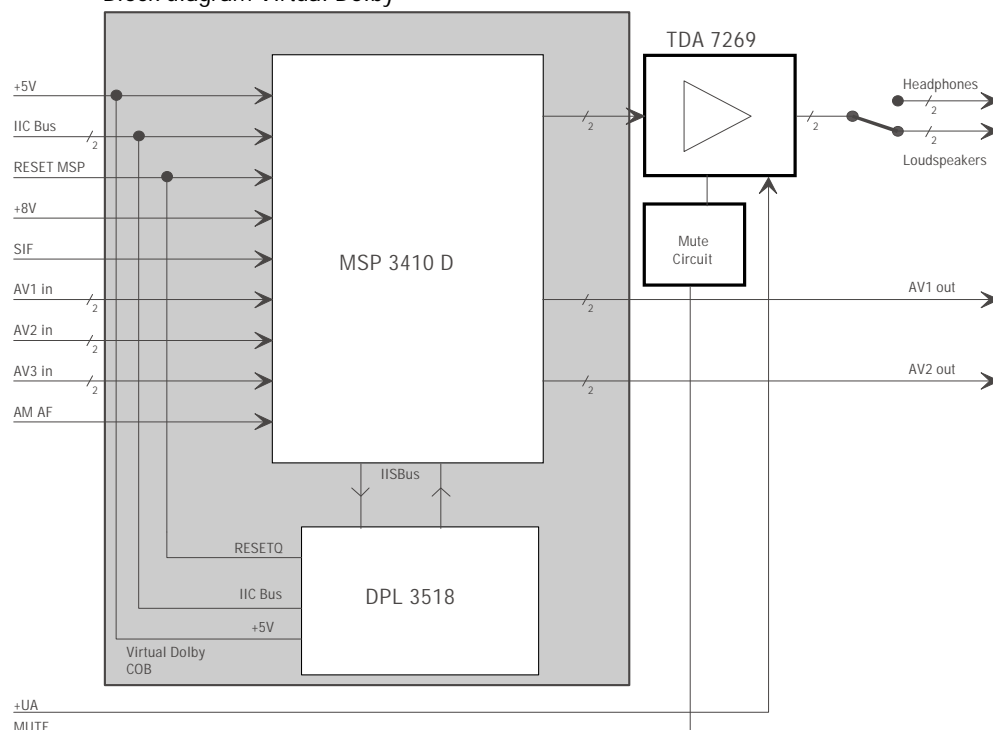
Interface requirement audio part with Dolby Prologic



Block diagram Dolby Prologic



Block diagram Virtual Dolby





IRIS REPAIR CODING SYSTEM

SYMPTOM CODE TABLE



1	CONSTANTLY
2	INTERMITTENTLY
3	AFTER A WHILE
4	IN A HOT ENVIRONMENT
5	IN A COLD ENVIRONMENT
6	WHEN SWITCHING
7	UNDER VIBRATION
8	IN A DAMP/WET ENVIRONMENT
9	IN A DRY ENVIRONMENT
A	AFTER BEING DROPPED
B	AFTER LIGHTNING STRIKE
C	ONLY CERTAIN STATION(S)/SOFTWARE/ MODE
D	ONLY ON CERTAIN STANDARDS
E	ONLY ON ONE CHANNEL
F	ONLY WITH CERTAIN INPUT(S)
G	ONLY ON CERTAIN OUTPUT(S)
H	IN STANDBY/OFF MODE
J	AT EDIT POINT
K	WHEN INTERCONNECTED
L	LIQUID CONTAMINATION
X	NO SYMPTOM OR PROBLEM FOUND

(*1)
CAUTION
THE 'X' EXTENDED SYMPTOM CODES (*-XX) SHOULD ONLY BE USED TO INDICATE THAT A SUITABLE SYMPTOM DESCRIPTION IS NOT AVAILABLE IN THE CONCERNED SYMPTOM GROUP

	1	2	3	4	5	6	7	8
	NO ACTION	LEVEL	QUALITY	NOISE	UNSTABLE	RECORDING & PHYSICAL DAMAGES	SPECIAL FUNCTIONS	OTHER CONDITIONS
1 GENERAL	110 POWER PROBLEM	120 CHARGING PROBLEM	130 DISPLAY FUNCTION PROBLEM	140 ABNORMAL NOISE	150 REMOTE CONTROL PROBLEM	160 PHYSICAL DAMAGE	170 GENERAL FUNCTION PROBLEM	180 SPECIAL REQUIREMENTS
	111 NO POWER ON AC	121 NO BATTERY CHARGING	131 FAULTY TIMER/COUNTER DISPLAY	141 CRT DISCHARGING NOISE	151 NO REMOTE CONTROL OPERATION	161 DAMAGED CABINET	171 FAULTY CLOCK FUNCTION	181 TEST AND CHECK
	112 NO POWER WHEN USING AC-ADAPTER	122 INCOMPLETE BATTERY CHARGE	132 FAULTY LAMP/LED OPERATION	142 EHT DISCHARGING NOISE	152 INCORRECT REMOTE CONTROL OPERATION	162 DAMAGED HANDLE	172 FAULTY SLEEP FUNCTION	182 GENERAL OVERHAUL
	113 NO POWER WHEN USING DRY BATTERIES	123 OTHER CHARGING PROBLEM	133 FAULTY LEVEL METER OPERATION	143 NOISY CABINET	153 REMOTE CONTROL PROGRAMMING/ LEARNING MODE PROBLEM	163 DAMAGED CONTROL KNOB(S)/BUTTON(S)	173 FAULTY TIMER PROGRAMMING	183 SYSTEM FREQUENCY CONVERSION
	114 NO POWER WHEN USING RECHARGEABLE BATTERIES		134 FAULTY ON-SCREEN DISPLAY OPERATION	144 NOISY TRANSFORMER	154 POOR REMOTE CONTROL SENSITIVITY	164 DAMAGED DRIER/COVER	174 FAULTY TIMER RECORDING	184 INITIAL SETUP REQUESTED
	115 NO POWER FROM SOLAR CELL		135 ELECTRONIC TUNING DISPLAY FAULT	145 NOISY COMPONENT(S)	155 OTHER REMOTE CONTROL PROBLEM	165 DAMAGED SEAL	175 SOFTWARE PROGRAMMING PROBLEM	185 MODIFICATION/CIRCUIT CHANGE
	116 NO POWER WHEN USING A CAR BATTERY		136 MECHANICAL TUNING DISPLAY FAULT	146 RATTLE		166 DAMAGED PLUG OR SOCKET	176 FAULTY RECORD MUTE OPERATION	186 WRONG SET IN CARTON
	117 SHORT OPERATION TIME/SHORT BATTERY LIFE		137 FAULTY TIME CODE DISPLAY	147 OTHER ABNORMAL NOISE		167 DAMAGED LENS	177 FAULTY PROGRAMMED PLAYBACK OPERATION	187 OTHER SPECIAL REQUIREMENTS
	118 POWER-OFF FUNCTION NOT WORKING		138 FAULTY ALARM/ERROR DISPLAY			168 DAMAGED CARTRIDGE OR STYLUS	178 FAULTY MEMORY FUNCTION	188 SYMPTOM NOT AVAILABLE
	119 NO SWITCH-ON FROM STANDBY POWERS UP, BUT NO OPERATION		139 DISPLAY DIM			169 DAMAGED ANTENNA	179 OTHER GENERAL FUNCTION PROBLEM	
2 COMMUNICATION	210 NO RECEPTION	220 POOR RECEPTION	230 TRANSMISSION PROBLEM	240 NOISY RECEPTION/ TRANSMISSION	250 UNSTABLE RECEPTION/ TRANSMISSION	260 TUNING PROBLEM	270 SPECIAL COMMUNICATION PROBLEM	280 SPECIAL RECEPTION PROBLEM
	211 NO AM RECEPTION	221 POOR AM RECEPTION	231 NO TRANSMISSION	241 LINE NOISE	251 TUNING DRIFT	261 MANUAL TUNING PROBLEM	271 FAULTY DIALING	281 FAULTY STEREO RECEPTION
	212 NO FM RECEPTION	222 POOR FM RECEPTION	232 POOR TRANSMISSION	242 OSCILLATION	252 FADING	262 AUTOMATIC TUNING PROBLEM	272 FAULTY CHANNEL SELECTION	282 FAULTY MAIN CHANNEL (A) FUNCTION
	213 NO SW RECEPTION	223 POOR SW RECEPTION	233 TRANSMISSION LEVEL TOO HIGH	243 INTERSTATION INTERFERENCE	253 OTHER UNSTABLE RECEPTION/ TRANSMISSION PROBLEM	263 INCORRECT TUNING	273 FAULTY AUTO-ANSWER OPERATION	283 FAULTY SUB-CHANNEL (B) FUNCTION
	214 NO VHF RECEPTION	224 POOR VHF RECEPTION	234 NO TRANSMISSION BETWEEN BASE UNIT AND HANDSET	244 OTHER NOISE RECEPTION/TRANSMISSION PROBLEM		264 TUNING MEMORY PROBLEM	274 FAULTY MESSAGE READ-OUT FUNCTION	284 FAULTY VSB RECEPTION
	215 NO UHF RECEPTION	225 POOR UHF RECEPTION	235 POOR TRANSMISSION BETWEEN BASE UNIT AND HANDSET			265 OTHER TUNING PROBLEM	275 FAULTY AUTODIAL MEMORY	285 FAULTY RIOS/PS OPERATION
	216 NO BS RECEPTION	226 POOR BS RECEPTION	236 POOR TRANSMISSION BETWEEN BASE UNIT AND HANDSET				276 FAULTY SPEECH PROCESSING	286 FAULTY TELETEXT RECEPTION
	217 NO CS RECEPTION	227 POOR CS RECEPTION	237 OTHER TRANSMISSION PROBLEM				277 NO RINGING TONE	287 FAULTY SATELLITERITY RECEPTION
	218 NO HDTV RECEPTION	228 POOR HDTV RECEPTION					278 WEAK RINGING TONE	288 FAULTY FAX OPERATION
	219 NO QPS RECEPTION	229 POOR QPS RECEPTION					279 OTHER SPECIAL COMMUNICATION PROBLEM	289 OTHER SPECIAL RECEPTION PROBLEM
3 PICTURE	310 NO PICTURE	320 PICTURE LEVEL PROBLEM	330 PICTURE QUALITY PROBLEM	340 PICTURE NOISE	350 UNSTABLE PICTURE	360 POOR PICTURE RECORDING	370 SPECIAL PICTURE FUNCTION PROBLEM	380 PICTURE DISPLAY/PICKUP PROBLEM
	311 NO PICTURE IN E TO E MODE	321 PICTURE TOO DARK	331 POOR PICTURE RESOLUTION	341 SNOWY PICTURE	351 SYNC PROBLEM	361 NO PICTURE RECORDING	371 EDITING PROBLEM	381 BURN MARK ON DISPLAY/PICKUP
	312 NO PICTURE IN PLAYBACK MODE	322 PICTURE TOO BRIGHT	332 POOR FOCUS	342 DOT NOISE OR DROPOUT ON PICTURE	352 PICTURE PUMPING	362 NO ERASURE PROTECTION FOR VIDEO	372 FAULTY FADING/WIPER OPERATION	382 SCRATCH ON DISPLAY/PICKUP
	313 NO PICTURE IN VIEWFINDER	323 CONTRAST TOO LOW	333 RINGING ON PICTURE	343 NOISE BARS ON PICTURE	353 PICTURE JITTER	363 PREVIOUS VIDEO RECORDING NOT BEING ERASED	373 FAULTY NEGATIVE/POSITIVE SWITCHING FUNCTION	383 DUST/DIRT ON DISPLAY/PICKUP
	314 NO PICTURE, ONLY RASTER	324 CONTRAST TOO HIGH	334 EXCESSIVE SKEW/LAG	344 BLANKING LINES ON PICTURE	354 PICTURE SHAKING (HORIZONTAL OR VERTICAL)	364 UNWANTED ERASURE OF PICTURE	374 FAULTY SUPERIMPOSE/TELOP OPERATION	384 PHOSPHOR/PIXEL MISSING ON DISPLAY/PICKUP
	315 NO RASTER, BLACK PICTURE	325 SATURATED WHITE OR BLACK LEVEL	335 POOR LINEARTY OR GEOMETRY	345 GHOSTING ON PICTURE	355 FLICKERING PICTURE	365 NO CAMERA RECORDING	375 FAULTY PICTURE IN PICTURE/DIGITAL PICTURE OPERATION	385 BRIGHT POINT(S) IN PHOSPHOR/PIXEL
	316 ONLY HORIZONTAL LINE	326 SHADING ON PICTURE	336 PICTURE SIZE INCORRECT	346 BEATING ON PICTURE	356 FLASHING PICTURE	366 ONLY ONE FIELD PER FRAME BEING RECORDED	376 FAULTY PICTURE TRANSMISSION	386 OTHER PICTURE DISPLAY/PICKUP PROBLEM
	317 ONLY VERTICAL LINE	327 ONLY PARTIAL PICTURE	337 INCORRECT CENTRING OF PICTURE	347 VCR HEAD SWITCHING NOISE ON PICTURE	357 CYCLIC PICTURE MUTING	367 OTHER PICTURE RECORDING PROBLEM	377 FAULTY DIGITAL SHUTTER FUNCTION	
	318 OTHER 'NO PICTURE' PROBLEM	328 OTHER PICTURE LEVEL PROBLEM	338 PICTURE SLANTED	348 OVERMODULATION NOISE	358 HEAD IMPACT ERROR CAUSING UNSTABLE PICTURE		378 FAULTY GENLOCK FUNCTION	
			339 V-SIZE INCORRECT	349 VCR SKEW ERROR	359 VCR SKEW ERROR		379 FAULTY FLASH/STROBE FUNCTION	
4 COLOUR	410 NO COLOUR	420 COLOUR LEVEL PROBLEM	430 POOR COLOUR QUALITY	440 NOISY COLOUR	450 UNSTABLE COLOUR	460 POOR COLOUR RECORDING	470 SPECIAL COLOUR FUNCTION PROBLEM	480
	411 NO COLOUR IN E TO E MODE	421 WEAK COLOUR	431 SOME OR ALL COLOURS MISSING	441 COLOUR NOISE ON A BLACK & WHITE PICTURE	451 COLOUR FLASHING	461 NO COLOUR RECORDING	471 FAULTY AUTOMATIC WHITE BALANCE	481
	412 NO COLOUR IN PLAYBACK MODE	422 EXCESSIVE COLOUR	432 POOR WHITE BALANCE	442 COLOUR STREAKING	452 HUE CONSTANTLY CHANGING	462 OTHER COLOUR RECORDING PROBLEM	472 FAULTY COLOUR EFFECTS FUNCTION	482
	413 NO COLOUR IN VIEWFINDER	423 OTHER COLOUR LEVEL PROBLEM	433 HUE PROBLEM	443 COLOUR NOISE ON PICTURE	453 FLICKERING COLOUR		473 OTHER SPECIAL COLOUR FUNCTION PROBLEM	483
	414 NO COLOUR IN PART OF PICTURE		434 PURITY ERROR		454 COLOUR NOT LOCKED			484
	415 OTHER 'NO COLOUR' PROBLEM		435 LANDING ERROR		455 OTHER UNSTABLE COLOUR PROBLEM			485
			436 CONVERGENCE ERROR					486
			437 REGISTRATION ERROR					487
			438 PITCH MOIR					488
			439 OTHER COLOUR QUALITY PROBLEM					489
5 AUDIO	510 NO AUDIO	520 AUDIO LEVEL PROBLEM	530 AUDIO QUALITY	540 NOISY AUDIO	550 UNSTABLE AUDIO	560 POOR AUDIO RECORDING	570 POOR SPECIAL AUDIO FUNCTION	580 STEREO/MULTI MODE OPERATION PROBLEM
	511 NO SOUND IN E TO E MODE	521 LOW AUDIO LEVEL	531 POOR FREQUENCY RESPONSE	541 HUM	551 JUMPING OR REPEATING AUDIO	561 AUDIO NOT BEING RECORDED	571 FAULTY FADE OPERATION	581 NO STEREO OPERATION
	512 NO PLAYBACK OF OUTGOING MESSAGE(S)	522 EXCESSIVE AUDIO LEVEL	532 DISTORTED AUDIO	542 HISS	552 AUDIO PUMPING OR BREATHING	562 NO ERASURE PROTECTION FOR AUDIO	572 FAULTY ECHO OPERATION	582 POOR CHANNEL SEPARATION
	513 NO PLAYBACK OF INCOMING MESSAGE(S)	523 BALANCE PROBLEM	533 NO AUDIO OR POOR TREBLE	543 AUDIO DROPOUTS	553 UNWANTED AUDIO RECORDING NOT BEING ERASED	563 PREVIOUS AUDIO RECORDING NOT BEING ERASED	573 FAULTY COLOUR EFFECTS FUNCTION	583 DIFFERENCE IN PHASE BETWEEN CHANNELS
	514 OTHER 'NO AUDIO' PROBLEM	524 FADER PROBLEM	534 NO OR POOR BASS	544 STATIC, POP OR CLICK NOISE	554 CYCLIC AUDIO MUTING	564 UNWANTED ERASURE OF AUDIO	574 FAULTY REPEAT MODE OPERATION	584 PROBLEM WITH SURROUND SOUND MODE
		525 AUDIO LEVEL REMAINING	535 OTHER AUDIO QUALITY PROBLEM	545 BUZZ	555 WOVEN AND FLUTTER	565 MESSAGE NOT BEING RECORDED	575 FAULTY AUDIO PROCESSING	585 PROBLEM WITH PCM AUDIO MODE
		526 OTHER AUDIO LEVEL PROBLEM		546 SCRATCHING NOISE	556 HOWLING/ACOUSTIC FEEDBACK	566 OTHER AUDIO RECORDING PROBLEM	576 FAULTY SYNC RECORDING OPERATION	586 PROBLEM WITH PCM AUDIO MODE
				547 NOISY TAPE LOADING	557 IGNITION NOISE		577 FAULTY DBB/DOL OPERATION	587 OTHER STEREO/MULTI MODE PROBLEM
				548 MULTIPATH NOISE	558 OTHER UNSTABLE AUDIO PROBLEM		578 FAULTY NOISE REDUCTION OPERATION	588 OTHER SPECIAL AUDIO FUNCTION PROBLEM
				549 OTHER AUDIO NOISE PROBLEM			579 OTHER SPECIAL AUDIO FUNCTION PROBLEM	
6 MECHANISM	610 NO MECHANICAL OPERATION	620 IRREGULAR MECHANICAL OPERATION	630 SPEED PROBLEM	640 MECHANICAL NOISE	650	660 DAMAGE TO SOFTWARE	670 MECHANICAL OPERATION PROBLEM	680 LENS PROBLEM
	611 NO DISC ROTATION	621 IRREGULAR ROTATION	631 SPEED TOO FAST	641 ROTATION NOISE		661 TAPE GETS SCRATCHED	671 FAULTY START/STOP OPERATION	681 FOCUS PROBLEM
	612 NO FORWARD OPERATION	622 IRREGULAR FORWARD MODE	632 SPEED TOO SLOW	642 MOTOR NOISE		662 DISC GETS SCRATCHED	672 FAULTY PAUSE OPERATION	682 ZOOM PROBLEM
	613 NO REVERSE OPERATION	623 IRREGULAR REVERSE OPERATION	633 OTHER SPEED PROBLEM	643 WIND NOISE		663 TAPE GETS CHEWED/WRINKLED	673 FAULTY AUTOMATIC PROGRAM SEARCH	683 IRIS PROBLEM
	614 NO FAST FORWARD OR REWIND FUNCTION	624 BALANCE PROBLEM		644 TAPE SQUEALING		664 TAPE JAMMED OR BROKEN	674 FAULTY CUE/REVIEW MODE	684 MACRO PROBLEM
	615 NO LOADING	625 IRREGULAR FUNCTION		645 FAN NOISE		665 TAPE GETS CURLED	675 FAULTY SLOW MOTION OPERATION	685 OTHER LENS PROBLEM
	616 NO UNLOADING OR EJECTING OF TAPE	626 IRREGULAR LOADING		646 DISC SCRAPPING		666 SLACK TAPE	676 FAULTY HIGH-SPEED SCANNING MODE	
	617 NO AUTO SHUT-OFF OPERATION	627 IRREGULAR UNLOADING OR EJECTING OF TAPE		647 NOISY TAPE LOADING		667 TAPE STICKING	677 FAULTY SPEED COPY FUNCTION	
	618 TONEARM DOES NOT MOVE	628 IRREGULAR AUTO SHUT-OFF OPERATION		648 OTHER MECHANICAL NOISE PROBLEM		668 OTHER SOFTWARE DAMAGE PROBLEM	678 FAULTY REPEAT OPERATION	
	619 DISC NOT BEING EJECTED	629 IRREGULAR EJECTION OF DISC					679 FAULTY RECORD REVIEW MODE	
7 DATA PROCESSING	710 NO DATA PROCESSING	720 FAULTY DATA PROCESSING OPERATION	730 DATA DISPLAY PROBLEM	740	750	760 DATA READ/WRITE PROBLEM	770 SPECIAL DATA PROCESSING	780
	711 NO INITIAL SCREEN	721 INCORRECT DATA	731 INCORRECT CHARACTER DISPLAY			761 FORMATTING PROBLEM	771 FAULTY SELF-DIAGNOSTIC MODE	
	712 SYSTEM DOES NOT RESET	722 SYSTEM RESET WHILE BEING USED	732 MISSING DISPLAY CHARACTERS			762 DATA ON STORAGE MEDIUM BEING LOST	772 FAULTY WORD PROCESSING FUNCTION	
	713 SYSTEM DOES NOT BOOT UP	723 SYSTEM LOCKS OUT/CRASHES	733 FAULTY GRAPHIC DISPLAY			763 FRAME MEMORY PROBLEM	773 FAULTY GRAPHIC EDIT FUNCTION	
	714 FAULTY OPERATION OF PLUG-IN MODULE	724 FAULTY OPERATION OF PLUG-IN MODULE	734 FAULTY SWITCHING BETWEEN GRAPHIC/ CHARACTER MODE			764 OTHER DATA READ/WRITE PROBLEM	774 OTHER 'SPECIAL DATA FUNCTION' PROBLEM	
	715 NO KEYBOARD OPERATION	725 FAULTY KEYBOARD OPERATION						
	716 NO OPERATION FROM OTHER INPUT/OUTPUT	726 FAULTY OPERATION OF OTHER INPUT/OUTPUT	735 FAULTY PROMPT/CURSOR OPERATION					
	717 NO DATA STORAGE OPERATION	727 FAULTY DATA STORAGE OPERATION	736 DATA DISPLAY COLOUR INCORRECT					
	718 FAULTY DATA COMMUNICATION	728 FAULTY DATA COMMUNICATION	737 NO PAGING OR SCROLL MODE					
	719 OTHER 'NO DATA PROCESSING' PROBLEM	729 OTHER 'FAULTY DATA PROCESSING' PROBLEM	738 OTHER DATA DISPLAY PROBLEM					
8 PRINTING	810 NO PRINTER OPERATION	820 ERRONEOUS PRINTER OPERATION	830 POOR PRINT QUALITY	840 NOISY PRINTING	850 UNSTABLE PRINTER OPERATION	860 RIBBON/PAPER PROBLEMS	870	880 FAULTY FONT/CHARACTER FUNCTIONS
	811 NOT PRINTING	821 PRINT IMAGE REVERSED (NEGATIVE/ POSITIVE)	831 INCORRECT PRINTING POSITION	841 PRINTING NOISE LINES	851 UNSTABLE PAPER LOADING	861 RIBBON BROKEN	871	881 INCORRECT CHARACTERS
	812 NO COMMUNICATION WITH PRINTER	822 IRREGULAR PAPER FEED	832 LOW PRINT CONTRAST	842 DUBBED PRINT IMAGE	852 UNSTABLE MULTI-PAPER LOADING	862 RIBBON STUCK/STICKING	872	882 INCORRECT CHARACTER SIZE
	813 PAPER NOT LOADING	823 ERRONEOUS PRINT MODE SWITCHING	833 EXCESSIVE PRINT CONTRAST	843 OTHER NOISY PRINTING PROBLEM	853 INCORRECT LINE-UP OF CHARACTERS	863 RIBBON DERAILED	873	883 FONT LOADING PROBLEM
	814 NO PAPER FEED	824 OTHER PRINTER OPERATION PROBLEM	834 OTHER PRINTER OPERATION PROBLEM		854 OTHER UNSTABLE PRINTER OPERATION PROBLEM	864 PAPER STUCK/STICKING TO MECHANISM	874	884 OTHER FAULTY FONT/CHARACTER FUNCTION PROBLEM
	815 IMAGE FIXATION		835 PRINT IMAGE NOT SHARP			865 PAPER JAM		
	816 OTHER NO PRINTER OPERATION PROBLEM		836 DOTS MISSING-IN PRINT IMAGE			866 OTHER RIBBON/PAPER PROBLEM		
			837 OTHER PRINT QUALITY PROBLEM					

SECTION CODES

ANT	ANTENNA SECTION	HDD	HARD DISC DRIVE	RFU	BOOSTER/RF UNIT
APA	AUDIO PROCESSING/ANALOG	HFS	HIGH FREQUENCY SECTION (RF)	RHD	ROTARY HEAD(S)
APD	AUDIO PROCESSING/DIGITAL	HOL	CASSETTE HOLDER	SFT	SOFTWARE (TAPE, DISC, ETC.)
APR	SIGNAL PROCESSING (ANALOG)	IDS	INFORMATION DISPLAY SECTION	SHD	STATIONARY HEAD(S)
ARM	ARM MECHANISM	IFC	IF-CIRCUIT	SLD	SLED MECHANISM
BCH	BATTERY CHARGE	IMG	IMAGE DISPLAY UNIT	SNS	SENSOR UNIT
BZL	BEZEL	INC	INTERNAL CONNECTOR	SPK	SPEAKER
CBT	CABINET	INP	SIGNAL INPUT SECTION	SRS	SUPPLY REEL SECTION
CHA	CHASSIS	KBD	KEYBOARD (SEPARATE)	STA	STATIC BLOCK
CLK	CLOCK/TIMER SECTION	LDG	LOADING MECHANISM	SVO	SERVO SECTION
CPA	COLOUR PROCESSING/ANALOG	LNM	LENS MECHANISM	SYS	SYSTEM CONTROL SECTION
CPD	COLOUR PROCESSING/DIGITAL	MEM	MEMORY CIRCUIT	TDM	TAPE DRIVE MECHANISM
CRT	PICTURE TUBE	MIC	MICROPHONE SECTION	THR	THREADING MECHANISM
CTR	CONTROL PANEL	OUT	SIGNAL OUTPUT SECTION	TIM	TIMER SECTION
DDM	DISC DRIVE MECHANISM	PFM	PAPER FEED MECHANISM	TNR	TENSION REGULATOR
DFL	DEFLECTION CIRCUIT	PIN	PINCH ROLLER/LEVER	TPT	TAPE PATH
DPR	SIGNAL PROCESSING (DIGITAL)	PRG	PROGRAMMING SECTION	TRS	TAKE-UP REEL SECTION
ERA	ERASE CIRCUIT	PRI	PRINT BLOCK	TUN	TUNING SECTION
EXC	EXTERNAL CONNECTOR	PRT	PROTECTION CIRCUIT	TXT	TEXT PROCESSING
FDD	FLOPPY DISC DRIVE	PSU	POWER SUPPLY	VPA	VIDEO PROCESSING/ANALOG
FLX	FLEXIBLE PCB	PUD	PICK-UP DEVICE	VPD	VIDEO PROCESSING/DIGITAL
FMW	FIRMWARE	PWA	POWER AMP SECTION	VWF	VIEWFINDER
FPK	FOCUS PACK	REM	REMOTE CONTROL SECTION	WIR	LEAD WIRE
HCM	HEAD CARRIAGE MECHANISM	RFM	RIBBON FEED MECHANISM	XXX	CABINET/COSMETIC PARTS

DEFECT CODES

MECHANICAL		ELECTRICAL	
A	WORN OUT	N	EXHAUSTED, LOW EMISSION
B	DIRTY, CLOGGED	O	BURNT, ARCING, MISSING PIXELS
C	MISALIGNED	P	MISALIGNED
D	CUT, BROKEN	Q	SHORT
E	DEFORMED	R	OPEN
F	SNAPPED	S	LEAKING
G	SCRATCHED	T	BAD CONTACT, CONNECTION
H	CRACKED, PEELED, CORRODED	U	OPEN PATTERN
I	LOOSE	V	CRACKED PCB
J	SHAKY, UNSTABLE	W	COLD OR NO SOLDERING
K	LEAKING	X	BRIDGED SOLDERING
L	DRY (NO LUBRICANT)	Y	WRONG COMPONENT
M	FOREIGN OBJECT	Z	MISSING COMPONENT
		1	SOFTWARE BUG

REPAIR CODES

A	REPLACEMENT	N	MAINTENANCE
B	MECHANICAL ALIGNMENT	O	REFURBISHING
C	ELECTRICAL ALIGNMENT	P	PREVENTIVE PARTS REPLACEMENT
D	RESOLDERING	Q	PREVENTIVE ACTION WITHOUT PARTS REPLACEMENT
E	CLEANING	U	EXPLANATION FOR CUSTOMER
F	LUBRICATION	V	ESTIMATION REFUSED
G	REPAIRED ELECTRICAL PARTS	W	ESTIMATION WITH PARTS
H	REPAIRED MECHANICAL PARTS	X	ESTIMATION WITHOUT PARTS
I	S/B MODIFICATION		
J	REMOVED COMPONENT (S)	Y	RETURN WITHOUT REPAIR
K	ADDED COMPONENTS	Z	SET EXCHANGE
L	FUNCTIONAL CHECK		
M	SPECIFICATION MEASUREMENT		

FLAG: INDICATES THE ONE MAJOR SYMPTOM/PART COMBINATION BY '1'

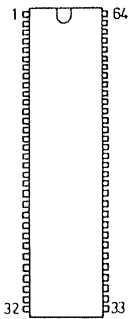
EXAMPLE OF USE :

FLAG	SYMPTOM CODE	PART NO	REF. NO	SECTION/PCB	DEFECT CODE	REPAIR CODE	QTY
<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
1	1 4 1 2	1 1 1 1 1 1 1 1	R 1 2 3 .	Y A 2 2 .	R	A	1
.	3 6 4 1	3 4 5 6 7 8 9 X X	1 1 1 . .	T D M . .	C	B	0

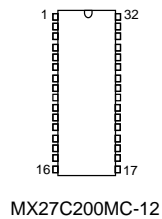
<p>LIST OF ABBREVIATIONS - LISTE DES ABREVIATIONS- ABKÜRZUNGEN</p> <p>LISTA DELLE ABBREVIAZIONI - LISTA DE ABREVIACIONES</p>
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● +USYS:	System voltage
● +U_VIDEO:	Video drive voltage for the CRT board
● + STDBY_ ON:	Standby data (0V standby , 0.6v switched ON)
● +5V DST:	5v unregulated voltage from the DST to supply the tuner and audio MSP device
● +5V ON:	5v regulated voltage from the DST to supply the tuner and audio MSP device
● +5V UP :	Microprocessor supply voltage
● BCL:	Beam current limiting information
● CVBS:	Composite video / luminance signal
● CVBS_OUT:	Composite video output
● CVBS_TXT:	Composite video for teletext extraction
● DEGAUSS:	Degauss signal
● EW :	East / West
● FORMAT / BC:	Full white control DATA depending on 16/9 selected format
● HDRV:	Horizontal deflection signal
● HTR1 / HTR2:	Heater voltage from the DST to CRT PCB
● LFB:	Line Fast Blanking
● MUTE :	Mutes audio amplifiers
● PO:	"Power ON " IP95 : reset activated and output = 8v "PO" = 5v when TV is working in normally
● POWER_FAIL:	Detection of mains supply and deflection stage failures
● RESET:	Microprocessor reset signal
● SAFETY:	Safety information from the deflection stage
● SCL:	Serial Clock
● SDA :	Serial Data
● SIF:	Sound IF
● TRAP_INFO:	31.4Mhz IF trap activation
● U_ STANDBY:	Standby voltage
● U_DRIVER:	Horizontal sync signal from TDA8855H
● U_TIMER:	11v voltage used during "Switch ON " phase and "Wake Up" mode
● V FLB:	Vertical flyback reference for the microprocessor
● V GUARD:	Safety data generated by the vertical amplifier TDA 8351
● V_RETRACE:	42 / 48volts (depending on tube type) generated by the DST and used for vertical blanking
● V_SUPPLY:	13.5 to 15.5 volts (depending on tube type) generated by the DST

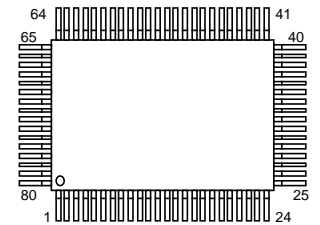
INTEGRATED CIRCUITS AND TRANSISTORS OUTLINE - CIRCUITS INTEGRES ET TRANSISTORS INTEGRIERTE SCHALTUNGEN UND TRANSISTOREN - CIRCUITI INTEGRATI TRANSISTOR CIRCUITOS INTEGRADOS Y TRANSISTORES



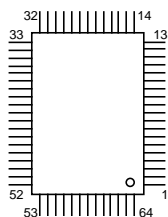
MPS3400C-PP-C6



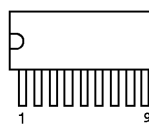
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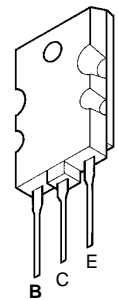
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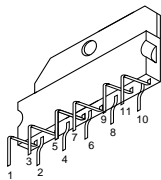
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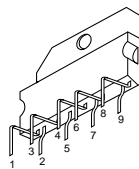
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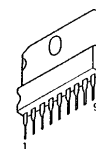
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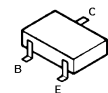
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TDA6107Q



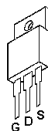
TDA 8139



BC 847B
BC 857B
BCR141
BCR191
DTC113ZK
DTC144EK
TN1401



ST24C08-M
TS3702CD



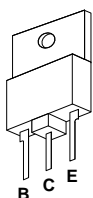
STP6 NA60F1



BT806 -600C



MC7812/CT



BD241C



BC 337
BC 546B
BC 547B



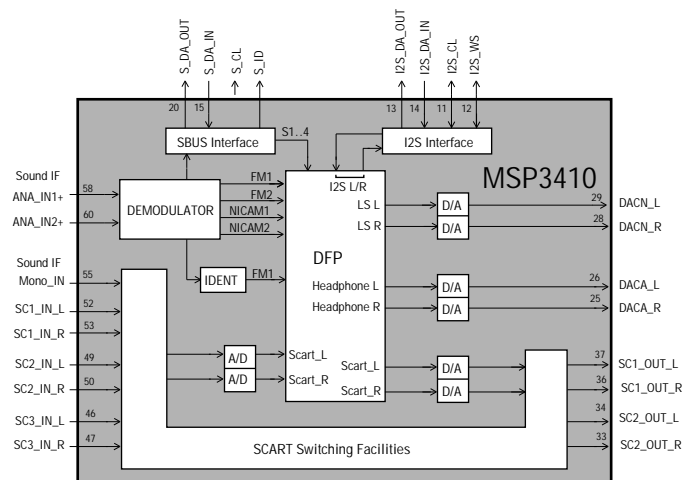
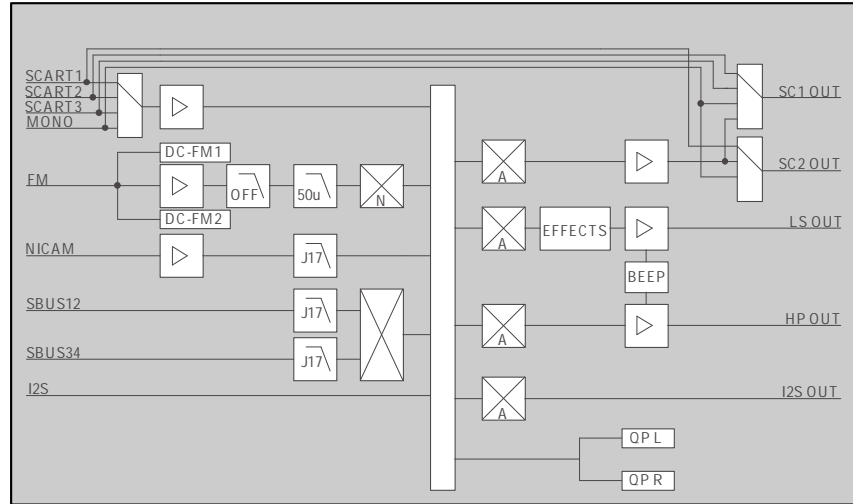
BF 422
BF423
2SA1020Y
2SC2236Y



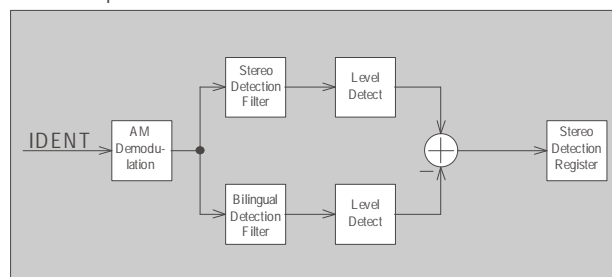
MPS750

INTEGRATED CIRCUITS BLOCK DIAGRAMS - SYNOPTIQUES INTERNES DES CIRCUITS INTEGRES - INTEGRIERTE SCHALTUNGEN BLOCKSCHALTBIlder SCHEMA A BLOCCHI DEI CIRCUITI INTEGRATI - VISTA INTERNA DE LOS CIRCUITOS INTEGRADOS

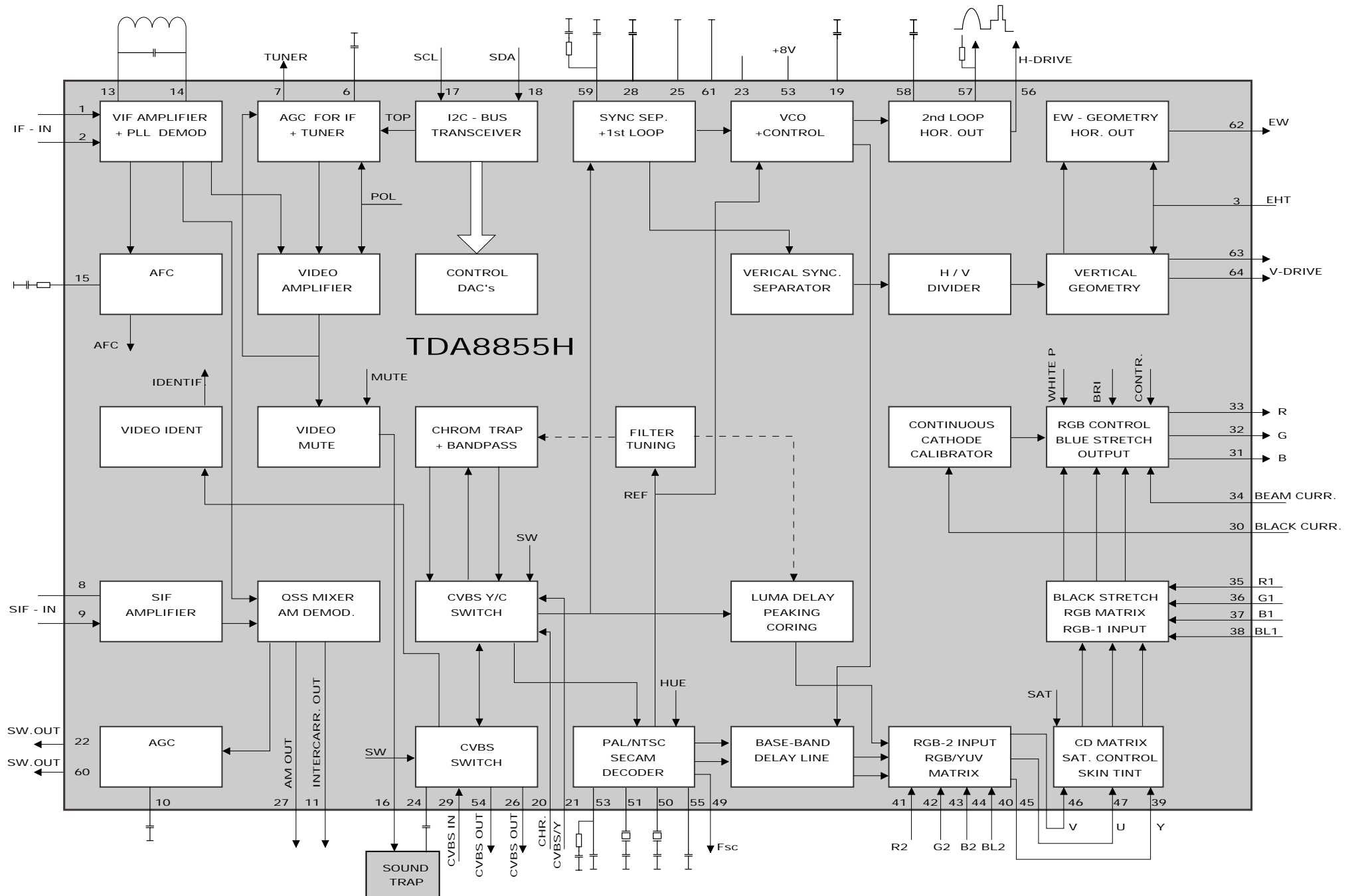
Audio baseband processing of the MSP3410



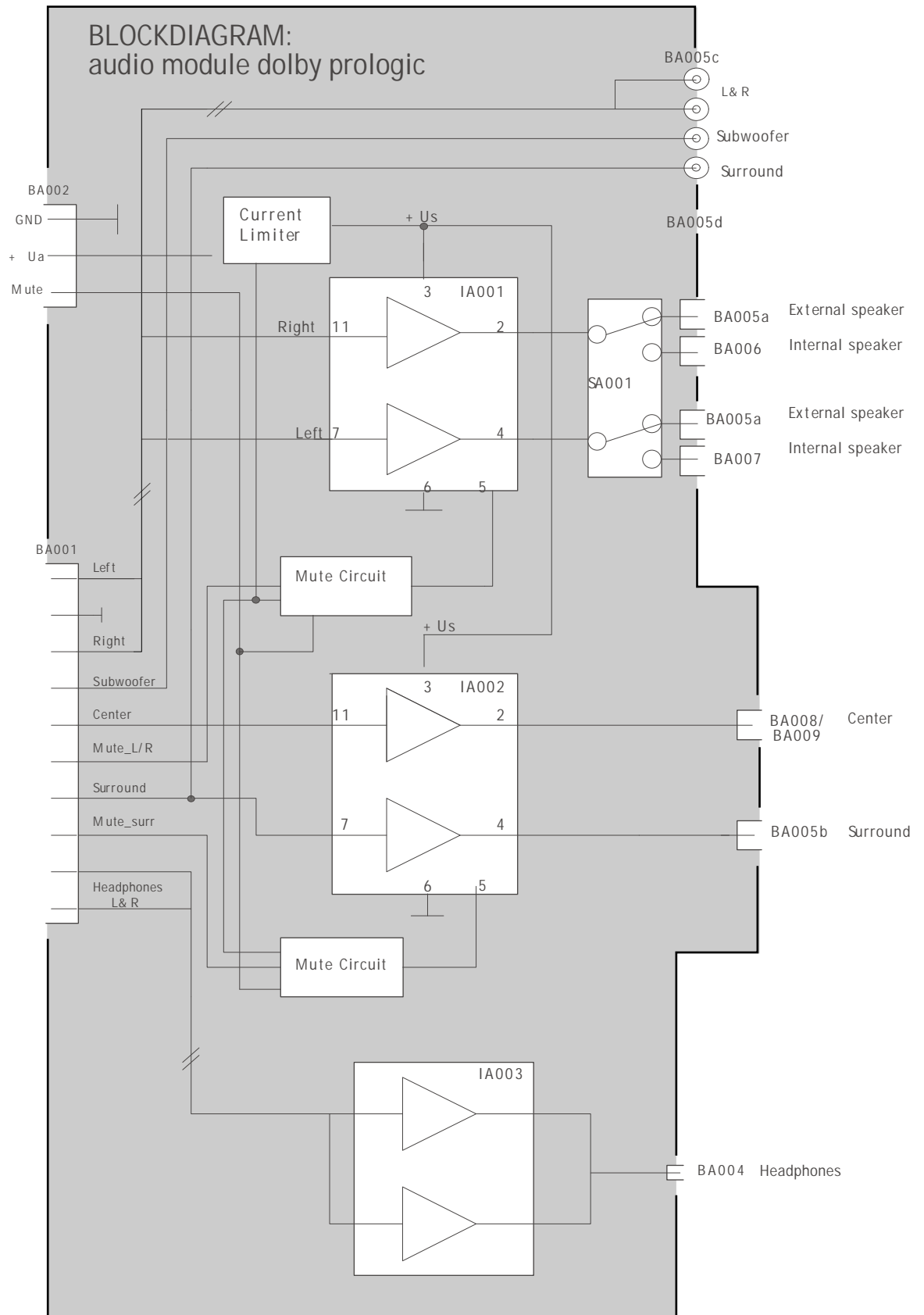
Detection part of the MSP 3410



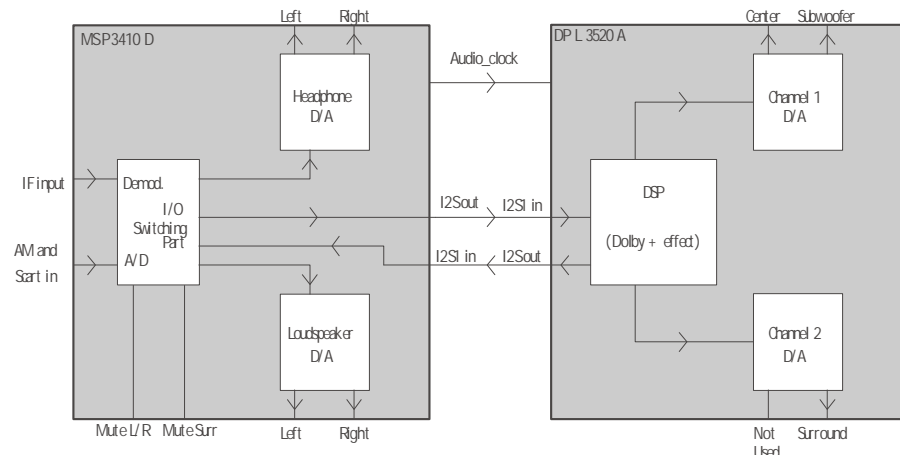
IV01 TDA 8855H



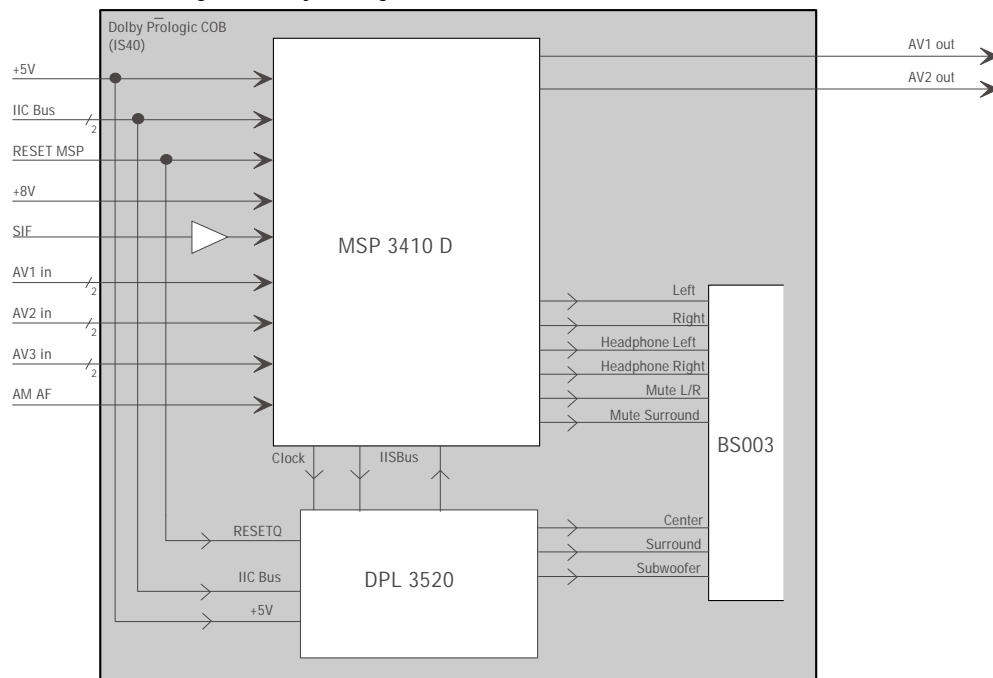
BLOCK DIAGRAM (AUDIO MODULE DOLBY PROLOGIC)
SCHEMA SYNOPTIQUE (AUDIO MODULE DOLBY PROLOGIC)
BLOCKSCHALTBIID (AUDIO MODULE DOLBY PROLOGIC)
SCHEMA A BLOCCI (AUDIO MODULE DOLBY PROLOGIC)
ESQUEMA DE BLOQUES (AUDIO MODULE DOLBY PROLOGIC)



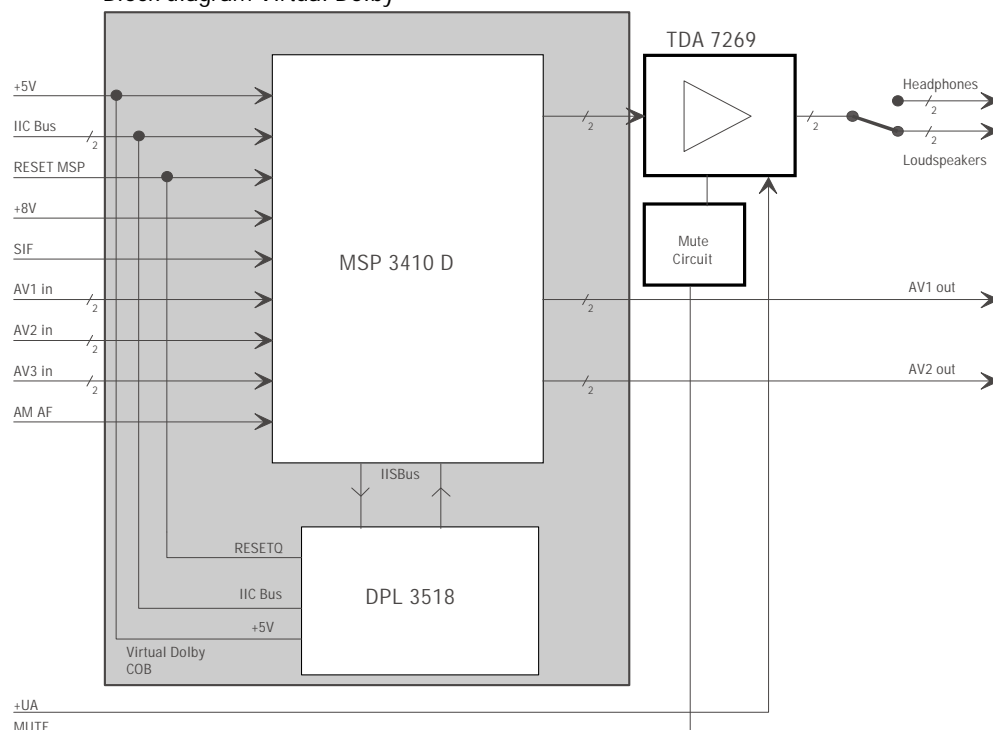
Interface requirement audio part with Dolby Prologic



Block diagram Dolby Prologic



Block diagram Virtual Dolby





IRIS REPAIR CODING SYSTEM

SYMPTOM CODE TABLE



	1	2	3	4	5	6	7	8
	NO ACTION	LEVEL	QUALITY	NOISE	UNSTABLE	RECORDING & PHYSICAL DAMAGES	SPECIAL FUNCTIONS	OTHER CONDITIONS
1	110 POWER PROBLEM	120 CHARGING PROBLEM	130 DISPLAY FUNCTION PROBLEM	140 ABNORMAL NOISE	150 REMOTE CONTROL PROBLEM	160 PHYSICAL DAMAGE	170 GENERAL FUNCTION PROBLEM	180 SPECIAL REQUIREMENTS
2	210 NO RECEPTION	220 POOR RECEPTION	230 TRANSMISSION PROBLEM	240 NOISY RECEPTION/TRANSMISSION	250 UNSTABLE RECEPTION/TRANSMISSION	260 TUNING PROBLEM	270 SPECIAL COMMUNICATION PROBLEM	280 SPECIAL RECEPTION PROBLEM
3	310 NO PICTURE	320 PICTURE LEVEL PROBLEM	330 PICTURE QUALITY PROBLEM	340 PICTURE NOISE	350 UNSTABLE PICTURE	360 POOR PICTURE RECORDING	370 SPECIAL PICTURE FUNCTION PROBLEM	380 PICTURE DISPLAY/PICKUP PROBLEM
4	410 NO COLOUR	420 COLOUR LEVEL PROBLEM	430 POOR COLOUR QUALITY	440 NOISY COLOUR	450 UNSTABLE COLOUR	460 POOR COLOUR RECORDING	470 SPECIAL COLOUR FUNCTION PROBLEM	480
5	510 NO AUDIO	520 AUDIO LEVEL PROBLEM	530 AUDIO QUALITY	540 NOISY AUDIO	550 UNSTABLE AUDIO	560 POOR AUDIO RECORDING	570 POOR SPECIAL AUDIO FUNCTION	580 STEREO/MULTI MODE OPERATION PROBLEM
6	610 NO MECHANICAL OPERATION	620 IRREGULAR MECHANICAL OPERATION	630 SPEED PROBLEM	640 MECHANICAL NOISE	650	660 DAMAGE TO SOFTWARE	670 MECHANICAL OPERATION PROBLEM	680 LENS PROBLEM
7	710 NO DATA PROCESSING	720 FAULTY DATA PROCESSING OPERATION	730 DATA DISPLAY PROBLEM	740	750	760 DATA READ/WRITE PROBLEM	770 SPECIAL DATA PROCESSING	780
8	810 NO PRINTER OPERATION	820 ERRONEOUS PRINTER OPERATION	830 POOR PRINT QUALITY	840 NOISY PRINTING	850 UNSTABLE PRINTER OPERATION	860 RIBBON/PAPER PROBLEMS	870	880 FAULTY FONT/CHARACTER FUNCTIONS
1	111 NO POWER ON AC	121 NO BATTERY CHARGING	131 FAULTY TIMER/COUNTER DISPLAY	141 CRT DISCHARGING NOISE	151 NO REMOTE CONTROL OPERATION	161 DAMAGED CABINET	171 FAULTY CLOCK FUNCTION	181 TEST AND CHECK
2	112 NO POWER WHEN USING AC-ADAPTER	122 INCOMPLETE BATTERY CHARGE	132 FAULTY LAMP/LED OPERATION	142 EHT DISCHARGING NOISE	152 INCORRECT REMOTE CONTROL OPERATION	162 DAMAGED HANDLE	172 FAULTY SLEEP FUNCTION	182 GENERAL OVERHAUL
3	113 NO POWER WHEN USING DRY BATTERIES	123 OTHER CHARGING PROBLEM	133 FAULTY LEVEL METER OPERATION	143 NOISY CABINET	153 REMOTE CONTROL PROGRAMMING/LEARNING MODE PROBLEM	163 DAMAGED CONTROL KNOB(S)/BUTTON(S)	173 FAULTY TIMER PROGRAMMING	183 SYSTEM FREQUENCY CONVERSION
4	114 NO POWER WHEN USING RECHARGEABLE BATTERIES		134 FAULTY ON-SCREEN DISPLAY OPERATION	144 NOISY TRANSFORMER	154 POOR REMOTE CONTROL SENSITIVITY	164 DAMAGED DRIER/COVER	174 FAULTY TIMER RECORDING	184 INITIAL SETUP REQUESTED
5	115 NO POWER FROM SOLAR CELL		135 ELECTRONIC TUNING DISPLAY FAULT	145 NOISY COMPONENT(S)	155 OTHER REMOTE CONTROL PROBLEM	165 DAMAGED SEAL	175 SOFTWARE PROGRAMMING PROBLEM	185 MODIFICATION/CIRCUIT CHANGE
6	116 NO POWER WHEN USING A CAR BATTERY		136 MECHANICAL TUNING DISPLAY FAULT	146 RATTLE		166 DAMAGED PLUG OR SOCKET	176 FAULTY RECORD MUTE OPERATION	186 WRONG SET IN CARTON
7	117 SHORT OPERATION TIME/SHORT BATTERY LIFE		137 FAULTY TIME CODE DISPLAY	147 OTHER ABNORMAL NOISE		167 DAMAGED CARTRIDGE OR STYLUS	177 FAULTY PROGRAMMED PLAYBACK OPERATION	187 OTHER SPECIAL REQUIREMENTS
8	118 POWER-OFF FUNCTION NOT WORKING		138 FAULTY ALARM/ERROR DISPLAY			168 DAMAGED ANTENNA	178 FAULTY MEMORY FUNCTION	188 SYMPTOM NOT AVAILABLE
9	119 IN A HOT ENVIRONMENT		139 DISPLAY DIM			169 DAMAGED CRT OR VIEWFINDER	179 OTHER GENERAL FUNCTION PROBLEM	
10	120 IN A COLD ENVIRONMENT		140 OTHER DISPLAY FUNCTION PROBLEM			170 PRINTED MARKINGS ERASED/PEELED OFF		
11	121 WHEN SWITCHING					171 MISSING COMPONENT(S) OR ORNAMENTAL PARTS		
12	122 UNDER VIBRATION					172 OTHER PHYSICAL DAMAGE		
13	123 IN A DAMP/WET ENVIRONMENT							
14	124 IN A DRY ENVIRONMENT							
15	125 AFTER BEING DROPPED							
16	126 AFTER LIGHTNING STRIKE							
17	127 ONLY CERTAIN STATION(S)/SOFTWARE/ MODE							
18	128 ONLY ON CERTAIN STANDARDS							
19	129 ONLY ON ONE CHANNEL							
20	130 ONLY WITH CERTAIN INPUT(S)							
21	131 ONLY ON CERTAIN OUTPUT(S)							
22	132 IN STANDBY/OFF MODE							
23	133 AT EDIT POINT							
24	134 WHEN INTERCONNECTED							
25	135 LIQUID CONTAMINATION							
26	136 NO SYMPTOM OR PROBLEM FOUND							
27	211 NO AM RECEPTION	221 POOR AM RECEPTION	231 NO TRANSMISSION	241 LINE NOISE	251 TUNING DRIFT	261 MANUAL TUNING PROBLEM	271 FAULTY DIALING	281 FAULTY STEREO RECEPTION
28	212 NO FM RECEPTION	222 POOR FM RECEPTION	232 POOR TRANSMISSION	242 OSCILLATION	252 FADING	262 AUTOMATIC TUNING PROBLEM	272 FAULTY CHANNEL SELECTION	282 FAULTY MAIN CHANNEL (A) FUNCTION
29	213 NO SW RECEPTION	223 POOR SW RECEPTION	233 TRANSMISSION LEVEL TOO HIGH	243 INTERSTATION INTERFERENCE	253 OTHER UNSTABLE RECEPTION/TRANSMISSION PROBLEM	263 INCORRECT TUNING	273 FAULTY AUTO-ANSWER OPERATION	283 FAULTY SUB-CHANNEL (B) FUNCTION
30	214 NO UHF RECEPTION	224 POOR UHF RECEPTION	234 NO TRANSMISSION BETWEEN BASE UNIT AND HANDSET	244 OTHER NOISE RECEPTION/TRANSMISSION PROBLEM		264 TUNING MEMORY PROBLEM	274 FAULTY MESSAGE READ-OUT FUNCTION	284 FAULTY VSB RECEPTION
31	215 NO BS RECEPTION	225 POOR BS RECEPTION	235 POOR TRANSMISSION BETWEEN BASE UNIT AND HANDSET			265 OTHER TUNING PROBLEM	275 FAULTY AUTOCLIP MEMORY	285 FAULTY PROSPS OPERATION
32	216 NO CS RECEPTION	226 POOR CS RECEPTION	236 POOR TRANSMISSION BETWEEN BASE UNIT AND HANDSET				276 FAULTY SPEECH PROCESSING	286 FAULTY TELETEXT RECEPTION
33	217 NO HDTV RECEPTION	227 POOR HDTV RECEPTION	237 OTHER TRANSMISSION PROBLEM				277 NO RINGING TONE	287 FAULTY SATELLITERITY RECEPTION
34	218 NO QPS RECEPTION	228 POOR QPS RECEPTION	238 OTHER TRANSMISSION PROBLEM				278 WEAK RINGING TONE	288 FAULTY FAX OPERATION
35	219 OTHER 'NO RECEPTION' PROBLEM	229 OTHER 'POOR RECEPTION' PROBLEM					279 OTHER SPECIAL COMMUNICATION PROBLEM	289 OTHER SPECIAL RECEPTION PROBLEM
36	220	230						
37	311 NO PICTURE IN E TO E MODE	321 PICTURE TOO DARK	331 POOR PICTURE RESOLUTION	341 SNOWY PICTURE	351 SYNC PROBLEM	361 NO PICTURE RECORDING	371 EDITING PROBLEM	381 BURN MARK ON DISPLAY/PICKUP
38	312 NO PICTURE IN PLAYBACK MODE	322 PICTURE TOO BRIGHT	332 POOR FOCUS	342 DOT NOISE OR DROPOUT ON PICTURE	352 PICTURE PUMPING	362 NO ERASURE PROTECTION FOR VIDEO	372 FAULTY FADING/WIPER OPERATION	382 SCRATCH ON DISPLAY/PICKUP
39	313 NO PICTURE IN VIEWFINDER	323 CONTRAST TOO LOW	333 RINGING ON PICTURE	343 NOISE BARS ON PICTURE	353 PICTURE JITTER	363 PREVIOUS VIDEO RECORDING NOT BEING ERASED	373 FAULTY NEGATIVE/POSITIVE SWITCHING FUNCTION	383 DUST/DIRT ON DISPLAY/PICKUP
40	314 NO PICTURE, ONLY RASTER	324 CONTRAST TOO HIGH	334 EXCESSIVE SKEW/LAG	344 BLANKING LINES ON PICTURE	354 PICTURE SHAKING (HORIZONTAL OR VERTICAL)	364 UNWANTED ERASURE OF PICTURE	374 FAULTY SUPERIMPOSE/TELOP OPERATION	384 PHOSPHOR/PIXEL MISSING ON DISPLAY/PICKUP
41	315 NO RASTER, BLACK PICTURE	325 SATURATED WHITE OR BLACK LEVEL	335 POOR LINEARTY OR GEOMETRY	345 GHOSTING ON PICTURE	355 FLICKERING PICTURE	365 NO CAMERA RECORDING	375 FAULTY PICTURE IN PICTURE/DIGITAL FUNCTION	385 BRIGHT POINT(S) IN PHOSPHOR/PIXEL
42	316 ONLY HORIZONTAL LINE	326 SHADING ON PICTURE	336 PICTURE SIZE INCORRECT	346 VCR HEAD SWITCHING NOISE ON PICTURE	356 FLASHING PICTURE	366 ONLY ONE FIELD PER FRAME BEING RECORDED	376 FAULTY PICTURE TRANSMISSION	386 OTHER PICTURE DISPLAY/PICKUP PROBLEM
43	317 ONLY VERTICAL LINE	327 ONLY PARTIAL PICTURE	337 PICTURE SLANTED	347 OVERMODULATION NOISE	357 CYCLIC PICTURE MUTING	367 OTHER PICTURE RECORDING PROBLEM	377 FAULTY DIGITAL SHUTTER FUNCTION	
44	318 OTHER 'NO PICTURE' PROBLEM	328 OTHER PICTURE LEVEL PROBLEM	338 PICTURE SLANTED	348 OTHER PICTURE NOISE PROBLEM	358 HEAD IMPACT ERROR CAUSING UNSTABLE PICTURE		378 FAULTY GENLOCK FUNCTION	
45			339 V-SIZE INCORRECT		359 VCR SKEW ERROR		379 FAULTY FLASH/STROBE FUNCTION	
46			340 H-SIZE INCORRECT		360 FROZEN PICTURE		380 FAULTY DIGITAL PICTURE FUNCTION	
47			341 OTHER PICTURE QUALITY PROBLEM		361 JUMPING/REPEATING PICTURE		381 FAULTY AUTO-EDIT FUNCTION	
48					362 OTHER 'UNSTABLE PICTURE' PROBLEM		382 OTHER SPECIAL PICTURE FUNCTION PROBLEM	
49	411 NO COLOUR IN E TO E MODE	421 WEAK COLOUR	431 SOME OR ALL COLOURS MISSING	441 COLOUR NOISE ON A BLACK & WHITE PICTURE	451 COLOUR FLASHING	461 NO COLOUR RECORDING	471 FAULTY AUTOMATIC WHITE BALANCE	481
50	412 EXCESSIVE COLOUR	422 POOR WHITE BALANCE	432 POOR WHITE BALANCE	442 COLOUR STREAKING	452 HUE CONSTANTLY CHANGING	462 OTHER COLOUR RECORDING PROBLEM	472 FAULTY COLOUR EFFECTS FUNCTION	482
51	413 NO COLOUR IN VIEWFINDER	423 OTHER COLOUR LEVEL PROBLEM	433 HUE PROBLEM	443 COLOUR NOISE PROBLEM	453 FLICKERING COLOUR		473 OTHER SPECIAL COLOUR FUNCTION PROBLEM	483
52	414 NO COLOUR IN PART OF PICTURE		434 PURITY ERROR		454 COLOUR NOT LOCKED			484
53	415 OTHER 'NO COLOUR' PROBLEM		435 LANDING ERROR		455 OTHER UNSTABLE COLOUR PROBLEM			485
54			436 CONVERGENCE ERROR					486
55			437 REGISTRATION ERROR					487
56			438 PITCH MOIR					488
57			439 OTHER COLOUR QUALITY PROBLEM					489
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SECTION CODES

ANT	ANTENNA SECTION	HDD	HARD DISC DRIVE	RFU	BOOSTER/RF UNIT
APA	AUDIO PROCESSING/ANALOG	HFS	HIGH FREQUENCY SECTION (RF)	RHD	ROTARY HEAD(S)
APD	AUDIO PROCESSING/DIGITAL	HOL	CASSETTE HOLDER	SFT	SOFTWARE (TAPE, DISC, ETC.)
APR	SIGNAL PROCESSING (ANALOG)	IDS	INFORMATION DISPLAY SECTION	SHD	STATIONARY HEAD(S)
ARM	ARM MECHANISM	IFC	IF-CIRCUIT	SLD	SLED MECHANISM
BCH	BATTERY CHARGE	IMG	IMAGE DISPLAY UNIT	SNS	SENSOR UNIT
BZL	BEZEL	INC	INTERNAL CONNECTOR	SPK	SPEAKER
CBT	CABINET	INP	SIGNAL INPUT SECTION	SRS	SUPPLY REEL SECTION
CHA	CHASSIS	KBD	KEYBOARD (SEPARATE)	STA	STATIC BLOCK
CLK	CLOCK/TIMER SECTION	LDG	LOADING MECHANISM	SVO	SERVO SECTION
CPA	COLOUR PROCESSING/ANALOG	LNM	LENS MECHANISM	SYS	SYSTEM CONTROL SECTION
CPD	COLOUR PROCESSING/DIGITAL	MEM	MEMORY CIRCUIT	TDM	TAPE DRIVE MECHANISM
CRT	PICTURE TUBE	MIC	MICROPHONE SECTION	THR	THREADING MECHANISM
CTR	CONTROL PANEL	OUT	SIGNAL OUTPUT SECTION	TIM	TIMER SECTION
DDM	DISC DRIVE MECHANISM	PFM	PAPER FEED MECHANISM	TNR	TENSION REGULATOR
DFL	DEFLECTION CIRCUIT	PIN	PINCH ROLLER/LEVER	TPT	TAPE PATH
DPR	SIGNAL PROCESSING (DIGITAL)	PRG	PROGRAMMING SECTION	TRS	TAKE-UP REEL SECTION
ERA	ERASE CIRCUIT	PRI	PRINT BLOCK	TUN	TUNING SECTION
EXC	EXTERNAL CONNECTOR	PRT	PROTECTION CIRCUIT	TXT	TEXT PROCESSING
FDD	FLOPPY DISC DRIVE	PSU	POWER SUPPLY	VPA	VIDEO PROCESSING/ANALOG
FLX	FLEXIBLE PCB	PUD	PICK-UP DEVICE	VPD	VIDEO PROCESSING/DIGITAL
FMW	FIRMWARE	PWA	POWER AMP SECTION	VWF	VIEWFINDER
FPK	FOCUS PACK	REM	REMOTE CONTROL SECTION	WIR	LEAD WIRE
HCM	HEAD CARRIAGE MECHANISM	RFM	RIBBON FEED MECHANISM	XXX	CABINET/COSMETIC PARTS

DEFECT CODES

MECHANICAL		ELECTRICAL	
A	WORN OUT	N	EXHAUSTED, LOW EMISSION
B	DIRTY, CLOGGED	O	BURNT, ARCING, MISSING PIXELS
C	MISALIGNED	P	MISALIGNED
D	CUT, BROKEN	Q	SHORT
E	DEFORMED	R	OPEN
F	SNAPPED	S	LEAKING
G	SCRATCHED	T	BAD CONTACT, CONNECTION
H	CRACKED, PEELED, CORRODED	U	OPEN PATTERN
I	LOOSE	V	CRACKED PCB
J	SHAKY, UNSTABLE	W	COLD OR NO SOLDERING
K	LEAKING	X	BRIDGED SOLDERING
L	DRY (NO LUBRICANT)	Y	WRONG COMPONENT
M	FOREIGN OBJECT	Z	MISSING COMPONENT
		1	SOFTWARE BUG

REPAIR CODES

A	REPLACEMENT	N	MAINTENANCE
B	MECHANICAL ALIGNMENT	O	REFURBISHING
C	ELECTRICAL ALIGNMENT	P	PREVENTIVE PARTS REPLACEMENT
D	RESOLDERING	Q	PREVENTIVE ACTION WITHOUT PARTS REPLACEMENT
E	CLEANING	U	EXPLANATION FOR CUSTOMER
F	LUBRICATION	V	ESTIMATION REFUSED
G	REPAIRED ELECTRICAL PARTS	W	ESTIMATION WITH PARTS
H	REPAIRED MECHANICAL PARTS	X	ESTIMATION WITHOUT PARTS
I	S/B MODIFICATION		
J	REMOVED COMPONENT (S)	Y	RETURN WITHOUT REPAIR
K	ADDED COMPONENTS	Z	SET EXCHANGE
L	FUNCTIONAL CHECK		
M	SPECIFICATION MEASUREMENT		

FLAG: INDICATES THE ONE MAJOR SYMPTOM/PART COMBINATION BY '1'

EXAMPLE OF USE :

FLAG	SYMPTOM CODE	PART NO	REF. NO	SECTION/PCB	DEFECT CODE	REPAIR CODE	QTY
<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
1	1 4 1 2	1 1 1 1 1 1 1 1	R 1 2 3 .	Y A 2 2 .	R	A	1
.	3 6 4 1	3 4 5 6 7 8 9 X X	1 1 1 . .	T D M . .	C	B	0



SYSTÈME DE CODAGE POUR RÉPARATION IRIS

TABLES DES CODES SYMPTÔMES



	1	PAS DE FONCTION	2	NIVEAU	3	QUALITÉ	4	BRUIT	5	INSTABILITÉ	6	PROBLÈMES PHYSIQUE OU D'ENREGISTREMENT	7	FONCTION SPÉCIALE	8	AUTRES CONDITIONS
1	110	PROBLÈME D'ALIMENTATION	120	PROBLÈME DE CHARGEMENT	130	DÉFAUT D'AFFICHAGE	140	BRUITS PARTICULIERS	150	PROBLÈME DE TELECOMMANDE	160	DOMMAGE PHYSIQUE	170	DÉFAUT DE LA FONCTION GÉNÉRALE	180	DEMANDES SPÉCIALES
2	210	PAS DE RÉCEPTION	220	PROBLÈME DU NIVEAU DE RÉCEPTION	230	PROBLÈME D'ÉMISSION	240	COMMUNICATION BRUITÉE	250	COMMUNICATION INSTABLE	260	DÉFAUT D'ACCORD	270	DÉFAUT DE COMMUNICATION SPÉCIALE	280	MAUVAISE RÉCEPTION PARTICULIÈRE
3	310	ABSENCE D'IMAGE	320	DÉFAUT DU NIVEAU D'IMAGE	330	MAUVAISE QUALITÉ D'IMAGE	340	IMAGE BRUITÉE	350	IMAGE INSTABLE	360	MAUVAIS ENREGISTREMENT D'IMAGE	370	MAUVAISE FONCTION SPÉCIALE DE L'IMAGE	380	DÉFAUT D'AFFICHAGE/TUBE IMAGE
4	410	ABSENCE DE COULEUR	420	MANQUE/EXCÈS DE COULEUR	430	MAUVAISE QUALITÉ DE COULEUR	440	COULEUR BRUITÉE	450	COULEUR INSTABLE	460	MAUVAIS ENREGISTREMENT DE COULEUR	470	MAUVAISE FONCTION SPÉCIALE DE COULEUR	480	
5	510	ABSENCE DE SON	520	MANQUE/EXCÈS DE SON	530	QUALITÉ DU SON	540	QUALITÉ DU SON	550	SON INSTABLE	560	MAUVAIS ENREGISTREMENT DU SON	570	MAUVAISE FONCTION AUDIO SPÉCIALE	580	MAUVAISE FONCTION STEREO/MULTI
6	610	PAS DE FONCTION MÉCANIQUE	620	FONCTION MÉCANIQUE IRRÉGULIÈRE	630	PROBLÈME DE VITESSE	640	BRUIT MÉCANIQUE	650		660	SOFTWARE ENDOMMAGÉ	670	MAUVAISE FONCTION MÉCANIQUE	680	DÉFAUT DE L'OBJECTIF
7	710	PAS DE TRAITEMENT DE DONNÉES	720	MAUVAIS TRAITEMENT DE DONNÉES	730	MAUVAIS AFFICHAGE DE DONNÉES	740		750		760	MAUVAISE LECTURE/ÉCRITURE DE DONNÉES	770	MAUVAIS TRAITEMENT SPÉCIAL DE DONNÉES	780	
8	810	PAS DE FONCTION DE L'IMPRIMANTE	820	FONCTION ERRONÉE DE L'IMPRIMANTE	830	MAUVAISE QUALITÉ D'IMPRESSION	840	IMPRESSION BRUITÉE	850	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	860	DÉFAUT DE RUBAN/PAPIER	870		880	MAUVAISE FONCTION DE POLICES/CARACTÈRES
9	910	PAS DE FONCTION DE L'IMPRIMANTE	920	FONCTION ERRONÉE DE L'IMPRIMANTE	930	MAUVAISE QUALITÉ D'IMPRESSION	940	IMPRESSION BRUITÉE	950	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	960	DÉFAUT DE RUBAN/PAPIER	970		980	MAUVAISE FONCTION DE POLICES/CARACTÈRES
10	1010	PAS DE FONCTION DE L'IMPRIMANTE	1020	FONCTION ERRONÉE DE L'IMPRIMANTE	1030	MAUVAISE QUALITÉ D'IMPRESSION	1040	IMPRESSION BRUITÉE	1050	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	1060	DÉFAUT DE RUBAN/PAPIER	1070		1080	MAUVAISE FONCTION DE POLICES/CARACTÈRES
11	1110	PAS DE FONCTION DE L'IMPRIMANTE	1120	FONCTION ERRONÉE DE L'IMPRIMANTE	1130	MAUVAISE QUALITÉ D'IMPRESSION	1140	IMPRESSION BRUITÉE	1150	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	1160	DÉFAUT DE RUBAN/PAPIER	1170		1180	MAUVAISE FONCTION DE POLICES/CARACTÈRES
12	1210	PAS DE FONCTION DE L'IMPRIMANTE	1220	FONCTION ERRONÉE DE L'IMPRIMANTE	1230	MAUVAISE QUALITÉ D'IMPRESSION	1240	IMPRESSION BRUITÉE	1250	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	1260	DÉFAUT DE RUBAN/PAPIER	1270		1280	MAUVAISE FONCTION DE POLICES/CARACTÈRES
13	1310	PAS DE FONCTION DE L'IMPRIMANTE	1320	FONCTION ERRONÉE DE L'IMPRIMANTE	1330	MAUVAISE QUALITÉ D'IMPRESSION	1340	IMPRESSION BRUITÉE	1350	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	1360	DÉFAUT DE RUBAN/PAPIER	1370		1380	MAUVAISE FONCTION DE POLICES/CARACTÈRES
14	1410	PAS DE FONCTION DE L'IMPRIMANTE	1420	FONCTION ERRONÉE DE L'IMPRIMANTE	1430	MAUVAISE QUALITÉ D'IMPRESSION	1440	IMPRESSION BRUITÉE	1450	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	1460	DÉFAUT DE RUBAN/PAPIER	1470		1480	MAUVAISE FONCTION DE POLICES/CARACTÈRES
15	1510	PAS DE FONCTION DE L'IMPRIMANTE	1520	FONCTION ERRONÉE DE L'IMPRIMANTE	1530	MAUVAISE QUALITÉ D'IMPRESSION	1540	IMPRESSION BRUITÉE	1550	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	1560	DÉFAUT DE RUBAN/PAPIER	1570		1580	MAUVAISE FONCTION DE POLICES/CARACTÈRES
16	1610	PAS DE FONCTION DE L'IMPRIMANTE	1620	FONCTION ERRONÉE DE L'IMPRIMANTE	1630	MAUVAISE QUALITÉ D'IMPRESSION	1640	IMPRESSION BRUITÉE	1650	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	1660	DÉFAUT DE RUBAN/PAPIER	1670		1680	MAUVAISE FONCTION DE POLICES/CARACTÈRES
17	1710	PAS DE FONCTION DE L'IMPRIMANTE	1720	FONCTION ERRONÉE DE L'IMPRIMANTE	1730	MAUVAISE QUALITÉ D'IMPRESSION	1740	IMPRESSION BRUITÉE	1750	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	1760	DÉFAUT DE RUBAN/PAPIER	1770		1780	MAUVAISE FONCTION DE POLICES/CARACTÈRES
18	1810	PAS DE FONCTION DE L'IMPRIMANTE	1820	FONCTION ERRONÉE DE L'IMPRIMANTE	1830	MAUVAISE QUALITÉ D'IMPRESSION	1840	IMPRESSION BRUITÉE	1850	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	1860	DÉFAUT DE RUBAN/PAPIER	1870		1880	MAUVAISE FONCTION DE POLICES/CARACTÈRES
19	1910	PAS DE FONCTION DE L'IMPRIMANTE	1920	FONCTION ERRONÉE DE L'IMPRIMANTE	1930	MAUVAISE QUALITÉ D'IMPRESSION	1940	IMPRESSION BRUITÉE	1950	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	1960	DÉFAUT DE RUBAN/PAPIER	1970		1980	MAUVAISE FONCTION DE POLICES/CARACTÈRES
20	2010	PAS DE FONCTION DE L'IMPRIMANTE	2020	FONCTION ERRONÉE DE L'IMPRIMANTE	2030	MAUVAISE QUALITÉ D'IMPRESSION	2040	IMPRESSION BRUITÉE	2050	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	2060	DÉFAUT DE RUBAN/PAPIER	2070		2080	MAUVAISE FONCTION DE POLICES/CARACTÈRES
21	2110	PAS DE FONCTION DE L'IMPRIMANTE	2120	FONCTION ERRONÉE DE L'IMPRIMANTE	2130	MAUVAISE QUALITÉ D'IMPRESSION	2140	IMPRESSION BRUITÉE	2150	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	2160	DÉFAUT DE RUBAN/PAPIER	2170		2180	MAUVAISE FONCTION DE POLICES/CARACTÈRES
22	2210	PAS DE FONCTION DE L'IMPRIMANTE	2220	FONCTION ERRONÉE DE L'IMPRIMANTE	2230	MAUVAISE QUALITÉ D'IMPRESSION	2240	IMPRESSION BRUITÉE	2250	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	2260	DÉFAUT DE RUBAN/PAPIER	2270		2280	MAUVAISE FONCTION DE POLICES/CARACTÈRES
23	2310	PAS DE FONCTION DE L'IMPRIMANTE	2320	FONCTION ERRONÉE DE L'IMPRIMANTE	2330	MAUVAISE QUALITÉ D'IMPRESSION	2340	IMPRESSION BRUITÉE	2350	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	2360	DÉFAUT DE RUBAN/PAPIER	2370		2380	MAUVAISE FONCTION DE POLICES/CARACTÈRES
24	2410	PAS DE FONCTION DE L'IMPRIMANTE	2420	FONCTION ERRONÉE DE L'IMPRIMANTE	2430	MAUVAISE QUALITÉ D'IMPRESSION	2440	IMPRESSION BRUITÉE	2450	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	2460	DÉFAUT DE RUBAN/PAPIER	2470		2480	MAUVAISE FONCTION DE POLICES/CARACTÈRES
25	2510	PAS DE FONCTION DE L'IMPRIMANTE	2520	FONCTION ERRONÉE DE L'IMPRIMANTE	2530	MAUVAISE QUALITÉ D'IMPRESSION	2540	IMPRESSION BRUITÉE	2550	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	2560	DÉFAUT DE RUBAN/PAPIER	2570		2580	MAUVAISE FONCTION DE POLICES/CARACTÈRES
26	2610	PAS DE FONCTION DE L'IMPRIMANTE	2620	FONCTION ERRONÉE DE L'IMPRIMANTE	2630	MAUVAISE QUALITÉ D'IMPRESSION	2640	IMPRESSION BRUITÉE	2650	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	2660	DÉFAUT DE RUBAN/PAPIER	2670		2680	MAUVAISE FONCTION DE POLICES/CARACTÈRES
27	2710	PAS DE FONCTION DE L'IMPRIMANTE	2720	FONCTION ERRONÉE DE L'IMPRIMANTE	2730	MAUVAISE QUALITÉ D'IMPRESSION	2740	IMPRESSION BRUITÉE	2750	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	2760	DÉFAUT DE RUBAN/PAPIER	2770		2780	MAUVAISE FONCTION DE POLICES/CARACTÈRES
28	2810	PAS DE FONCTION DE L'IMPRIMANTE	2820	FONCTION ERRONÉE DE L'IMPRIMANTE	2830	MAUVAISE QUALITÉ D'IMPRESSION	2840	IMPRESSION BRUITÉE	2850	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	2860	DÉFAUT DE RUBAN/PAPIER	2870		2880	MAUVAISE FONCTION DE POLICES/CARACTÈRES
29	2910	PAS DE FONCTION DE L'IMPRIMANTE	2920	FONCTION ERRONÉE DE L'IMPRIMANTE	2930	MAUVAISE QUALITÉ D'IMPRESSION	2940	IMPRESSION BRUITÉE	2950	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	2960	DÉFAUT DE RUBAN/PAPIER	2970		2980	MAUVAISE FONCTION DE POLICES/CARACTÈRES
30	3010	PAS DE FONCTION DE L'IMPRIMANTE	3020	FONCTION ERRONÉE DE L'IMPRIMANTE	3030	MAUVAISE QUALITÉ D'IMPRESSION	3040	IMPRESSION BRUITÉE	3050	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	3060	DÉFAUT DE RUBAN/PAPIER	3070		3080	MAUVAISE FONCTION DE POLICES/CARACTÈRES
31	3110	PAS DE FONCTION DE L'IMPRIMANTE	3120	FONCTION ERRONÉE DE L'IMPRIMANTE	3130	MAUVAISE QUALITÉ D'IMPRESSION	3140	IMPRESSION BRUITÉE	3150	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	3160	DÉFAUT DE RUBAN/PAPIER	3170		3180	MAUVAISE FONCTION DE POLICES/CARACTÈRES
32	3210	PAS DE FONCTION DE L'IMPRIMANTE	3220	FONCTION ERRONÉE DE L'IMPRIMANTE	3230	MAUVAISE QUALITÉ D'IMPRESSION	3240	IMPRESSION BRUITÉE	3250	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	3260	DÉFAUT DE RUBAN/PAPIER	3270		3280	MAUVAISE FONCTION DE POLICES/CARACTÈRES
33	3310	PAS DE FONCTION DE L'IMPRIMANTE	3320	FONCTION ERRONÉE DE L'IMPRIMANTE	3330	MAUVAISE QUALITÉ D'IMPRESSION	3340	IMPRESSION BRUITÉE	3350	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	3360	DÉFAUT DE RUBAN/PAPIER	3370		3380	MAUVAISE FONCTION DE POLICES/CARACTÈRES
34	3410	PAS DE FONCTION DE L'IMPRIMANTE	3420	FONCTION ERRONÉE DE L'IMPRIMANTE	3430	MAUVAISE QUALITÉ D'IMPRESSION	3440	IMPRESSION BRUITÉE	3450	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	3460	DÉFAUT DE RUBAN/PAPIER	3470		3480	MAUVAISE FONCTION DE POLICES/CARACTÈRES
35	3510	PAS DE FONCTION DE L'IMPRIMANTE	3520	FONCTION ERRONÉE DE L'IMPRIMANTE	3530	MAUVAISE QUALITÉ D'IMPRESSION	3540	IMPRESSION BRUITÉE	3550	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	3560	DÉFAUT DE RUBAN/PAPIER	3570		3580	MAUVAISE FONCTION DE POLICES/CARACTÈRES
36	3610	PAS DE FONCTION DE L'IMPRIMANTE	3620	FONCTION ERRONÉE DE L'IMPRIMANTE	3630	MAUVAISE QUALITÉ D'IMPRESSION	3640	IMPRESSION BRUITÉE	3650	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	3660	DÉFAUT DE RUBAN/PAPIER	3670		3680	MAUVAISE FONCTION DE POLICES/CARACTÈRES
37	3710	PAS DE FONCTION DE L'IMPRIMANTE	3720	FONCTION ERRONÉE DE L'IMPRIMANTE	3730	MAUVAISE QUALITÉ D'IMPRESSION	3740	IMPRESSION BRUITÉE	3750	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	3760	DÉFAUT DE RUBAN/PAPIER	3770		3780	MAUVAISE FONCTION DE POLICES/CARACTÈRES
38	3810	PAS DE FONCTION DE L'IMPRIMANTE	3820	FONCTION ERRONÉE DE L'IMPRIMANTE	3830	MAUVAISE QUALITÉ D'IMPRESSION	3840	IMPRESSION BRUITÉE	3850	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	3860	DÉFAUT DE RUBAN/PAPIER	3870		3880	MAUVAISE FONCTION DE POLICES/CARACTÈRES
39	3910	PAS DE FONCTION DE L'IMPRIMANTE	3920	FONCTION ERRONÉE DE L'IMPRIMANTE	3930	MAUVAISE QUALITÉ D'IMPRESSION	3940	IMPRESSION BRUITÉE	3950	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	3960	DÉFAUT DE RUBAN/PAPIER	3970		3980	MAUVAISE FONCTION DE POLICES/CARACTÈRES
40	4010	PAS DE FONCTION DE L'IMPRIMANTE	4020	FONCTION ERRONÉE DE L'IMPRIMANTE	4030	MAUVAISE QUALITÉ D'IMPRESSION	4040	IMPRESSION BRUITÉE	4050	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	4060	DÉFAUT DE RUBAN/PAPIER	4070		4080	MAUVAISE FONCTION DE POLICES/CARACTÈRES
41	4110	PAS DE FONCTION DE L'IMPRIMANTE	4120	FONCTION ERRONÉE DE L'IMPRIMANTE	4130	MAUVAISE QUALITÉ D'IMPRESSION	4140	IMPRESSION BRUITÉE	4150	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	4160	DÉFAUT DE RUBAN/PAPIER	4170		4180	MAUVAISE FONCTION DE POLICES/CARACTÈRES
42	4210	PAS DE FONCTION DE L'IMPRIMANTE	4220	FONCTION ERRONÉE DE L'IMPRIMANTE	4230	MAUVAISE QUALITÉ D'IMPRESSION	4240	IMPRESSION BRUITÉE	4250	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	4260	DÉFAUT DE RUBAN/PAPIER	4270		4280	MAUVAISE FONCTION DE POLICES/CARACTÈRES
43	4310	PAS DE FONCTION DE L'IMPRIMANTE	4320	FONCTION ERRONÉE DE L'IMPRIMANTE	4330	MAUVAISE QUALITÉ D'IMPRESSION	4340	IMPRESSION BRUITÉE	4350	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	4360	DÉFAUT DE RUBAN/PAPIER	4370		4380	MAUVAISE FONCTION DE POLICES/CARACTÈRES
44	4410	PAS DE FONCTION DE L'IMPRIMANTE	4420	FONCTION ERRONÉE DE L'IMPRIMANTE	4430	MAUVAISE QUALITÉ D'IMPRESSION	4440	IMPRESSION BRUITÉE	4450	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	4460	DÉFAUT DE RUBAN/PAPIER	4470		4480	MAUVAISE FONCTION DE POLICES/CARACTÈRES
45	4510	PAS DE FONCTION DE L'IMPRIMANTE	4520	FONCTION ERRONÉE DE L'IMPRIMANTE	4530	MAUVAISE QUALITÉ D'IMPRESSION	4540	IMPRESSION BRUITÉE	4550	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	4560	DÉFAUT DE RUBAN/PAPIER	4570		4580	MAUVAISE FONCTION DE POLICES/CARACTÈRES
46	4610	PAS DE FONCTION DE L'IMPRIMANTE	4620	FONCTION ERRONÉE DE L'IMPRIMANTE	4630	MAUVAISE QUALITÉ D'IMPRESSION	4640	IMPRESSION BRUITÉE	4650	FONCTIONNEMENT INSTABLE DE L'IMPRIMANTE	4660	DÉFAUT DE RUBAN/PAPIER	4670		4680	MAUVAISE FONCTION DE POLICES/CARACTÈRES
47	4710	PAS DE FONCTION DE L'IMPRIMANTE	4720	FONCTION ERRONÉE DE L'IMPRIMANTE	4730	MAUVAISE QUALITÉ D'IMPRESSION	4740	IMPRESSION BRUITÉE	4750	<						

CODES DE SECTION

ANT	ÉTAGE D'ANTENNE	HDD	ENTRAÎNEMENT DU DISQUE DUR	RFU	AMPLIFICATEUR/UNITÉ RF
APA	TRAITEMENT AUDIO ANALOGIQUE	HFS	ÉTAGE DE HAUTE FRÉQUENCE	RHD	TÊTE(S) ROTATIVE(S)
APD	TRAITEMENT AUDIO DIGITAL	HOL	SUPPORT DE CASSETTE	SFT	SOFTWARE (BANDE, DISQUE, ETC.)
APR	TRAITEMENT DES SIGNAUX (ANALOGIQUE)	IDS	CIRCUIT DE DISPLAY	SHD	TÊTE(S) FIXE(S)
ARM	MÉCANISME DU BRAS	IFC	CIRCUIT FI	SLD	MÉCANISME DE DÉPLACEMENT
BCH	CHARGEMENT DE BATTERIE	IMG	UNITÉ D'AFFICHAGE D'IMAGES	SNS	UNITÉ DE DÉTECTION
BZL	COUVERCLE	INC	CONNECTEUR INTERNE	SPK	HAUT-PARLEUR
CBT	BOÎTIER	INP	ÉTAGE D'ENTRÉE DES SIGNAUX	SRS	ÉTAGE DE LA BOBINE DÉBITRICE
CHA	CHÂSSIS	KBD	CLAVIER	STA	BLOQUE STATIQUE
CLK	ÉTAGE DE MINUTERIE	LDG	MÉCANISME DE CHARGEMENT	SVO	ÉTAGE D'ASSERVISSEMENT
CPA	TRAITEMENT COULEUR ANALOGIQUE	LNМ	MÉCANISME DE LENTILLE	SYS	ÉTAGE DU SYSTÈME DE CONTRÔLE
CPD	TRAITEMENT COULEUR DIGITAL	MEM	ÉTAGE DE MÉMOIRE	TDM	MÉCANISME D'ENTRAÎNEMENT DE LA BANDE
CRT	ÉCRAN CATHODIQUE	MIC	ÉTAGE DE MICROPHONE	THR	MÉCANISME DE MISE EN PLACE
CTR	PANNEAU DE CONTRÔLE	OUT	ÉTAGE DE SORTIE DES SIGNAUX	TIM	ÉTAGE D'HORLOGE
DDM	ÉTAGE D'ENTRAÎNEMENT DU DISQUE	PFM	MÉCANISME D'AVANCEMENT DU PAPIER	TNR	LEVIER DE RÉGLAGE DE LA TENSION DE BANDE
DFL	CIRCUIT DE DÉVIATION	PIN	GALET/LEVIER PRESSEUR	TPT	PARCOURS DE BANDE
DPR	TRAITEMENT DES SIGNAUX (NUMÉRIQUE)	PRG	ÉTAGE DE PROGRAMMATION	TRS	ÉTAGE DE LA BOBINE RÉCEPTRICE
ERA	CIRCUIT EFFACEMENT	PRI	BLOC D'IMPRIMANTE	TUN	ÉTAGE DE SYNTONISATION
EXC	CONNECTEUR EXTERNE	PRT	CIRCUIT DE PROTECTION	TXT	TRAITEMENT DE TEXTE
FDD	ENTRAÎNEMENT DU DISQUE FLEXIBLE	PSU	ALIMENTATION	VPA	TRAITEMENT VIDÉO ANALOGIQUE
FLX	PLAQUETTE FLEXIBLE	PUD	PHONOLECTEUR	VPD	TRAITEMENT VIDÉO DIGITAL
FMW	PROGRAMMATION FIXE	PWA	AMPLIFICATEUR DE PUISSANCE	VWF	WISEUR
FPK	CIRCUIT DE MISE AU POINT	REM	TÉLÉCOMMANDE	WIR	CÂBLE
HCM	MÉCANISME DE SUPPORT DE TÊTE	RFM	MÉCANISME D'AVANCEMENT DU RUBAN	XXX	PIÈCES ESTHÉTIQUES

CODES DE DÉFAUTS

MÉCANIQUE		ÉLECTRIQUE	
A	USÉ	N	ÉPUISÉ, ÉMISSION FAIBLE
B	SALE, MACULÉ	O	BRÛLÉ, ARC, PIXELS MANQUANTS
C	DÉRÉGLAGE	P	DÉRÉGLAGE
D	COUPURE, DÉFECTUEUX	Q	COURT-CIRCUIT
E	DÉFORMATION	R	OUVERTURE
F	ENCLenchement, CALAGE	S	FUITE
G	ÉGRATIGNURES	T	MAUVAIS CONTACT, SOUDURE
H	FISSURE, PELURE, CORROSION	U	CIRCUIT OUVERT
I	DÉTACHEMENT	V	PLAQUETTE FISSURÉE
J	INSTABLE	W	SOUDURE SÈCHE OU MANQUANTE
K	FUITE	X	SOUDURE EN PONT
L	SEC (PAS DE LUBRIFIANT)	Y	PIÈCE ERRONÉE
M	OBJET, CORPS ÉTRANGER	Z	PIÈCE MANQUANTE
		1	ERREUR DE LOGICIEL

CODES DE RÉPARATION

A	REPLACEMENT	N	ENTRETIEN
B	RÉGLAGE MÉCANIQUE	O	REMISE EN ÉTAT
C	RÉGLAGE ÉLECTRIQUE	P	REPLACEMENT PRÉVENTIF DE PIÈCES
D	RESSOUDURE PRÉVENTIVE	Q	ACTION PRÉVENTIVE SANS REPLACEMENT DE PIÈCES
E	NETTOYAGE	U	EXPLICATIONS COMPLÉMENTAIRES
F	LUBRIFICATION	V	DEVIS REFUSÉ
G	RÉPARATION PIÈCES ÉLECTRIQUES	W	DEVIS INCLUANT LES PIÈCES
H	RÉPARATION PIÈCES MÉCANIQUES	X	DEVIS EXCLUANT LES PIÈCES
I	MODIFICATION SELON BULLETIN TECHNIQUE		
J	PIÈCES ENLEVÉES		
K	PIÈCES AJOUTÉES	Y	RETOUR AU CLIENT SANS RÉPARATION
L	CONTRÔLE FONCTIONNEL	Z	ÉCHANGE D'APPAREIL
M	MESURE DES SPÉCIFICATIONS		

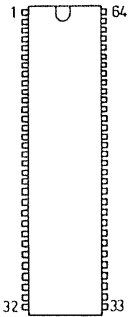
EXEMPLE :

CODE SYMPTÔME	RÉFÉRENCE SCHEMA	CODE SECTION	CODE PLAQUETTE	CODE DÉFAUT	CODE RÉPARATION
<div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>
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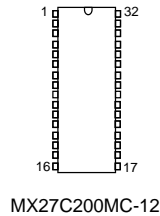
<p>LIST OF ABBREVIATIONS - LISTE DES ABREVIATIONS- ABKÜRZUNGEN</p> <p>LISTA DELLE ABBREVIAZIONI - LISTA DE ABREVIACIONES</p>
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● +USYS:	System voltage
● +U_VIDEO:	Video drive voltage for the CRT board
● + STDBY_ ON:	Standby data (0V standby , 0.6v switched ON)
● +5V DST:	5v unregulated voltage from the DST to supply the tuner and audio MSP device
● +5V ON:	5v regulated voltage from the DST to supply the tuner and audio MSP device
● +5V UP :	Microprocessor supply voltage
● BCL:	Beam current limiting information
● CVBS:	Composite video / luminance signal
● CVBS_OUT:	Composite video output
● CVBS_TXT:	Composite video for teletext extraction
● DEGAUSS:	Degauss signal
● EW :	East / West
● FORMAT / BC:	Full white control DATA depending on 16/9 selected format
● HDRV:	Horizontal deflection signal
● HTR1 / HTR2:	Heater voltage from the DST to CRT PCB
● LFB:	Line Fast Blanking
● MUTE :	Mutes audio amplifiers
● PO:	"Power ON " IP95 : reset activated and output = 8v "PO" = 5v when TV is working in normally
● POWER_FAIL:	Detection of mains supply and deflection stage failures
● RESET:	Microprocessor reset signal
● SAFETY:	Safety information from the deflection stage
● SCL:	Serial Clock
● SDA :	Serial Data
● SIF:	Sound IF
● TRAP_INFO:	31.4Mhz IF trap activation
● U_ STANDBY:	Standby voltage
● U_DRIVER:	Horizontal sync signal from TDA8855H
● U_TIMER:	11v voltage used during "Switch ON " phase and "Wake Up" mode
● V FLB:	Vertical flyback reference for the microprocessor
● V GUARD:	Safety data generated by the vertical amplifier TDA 8351
● V_RETRACE:	42 / 48volts (depending on tube type) generated by the DST and used for vertical blanking
● V_SUPPLY:	13.5 to 15.5 volts (depending on tube type) generated by the DST

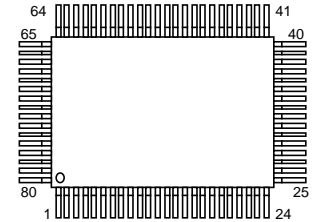
INTEGRATED CIRCUITS AND TRANSISTORS OUTLINE - CIRCUITS INTEGRES ET TRANSISTORS INTEGRIERTE SCHALTUNGEN UND TRANSISTOREN - CIRCUITI INTEGRATI TRANSISTOR CIRCUITOS INTEGRADOS Y TRANSISTORES



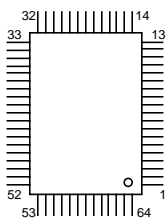
MPS3400C-PP-C6



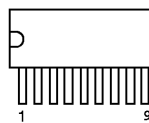
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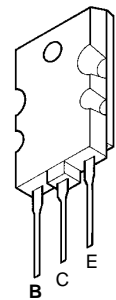
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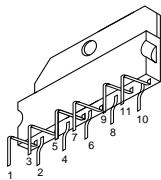
TDA8855H



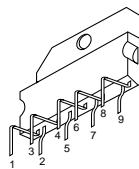
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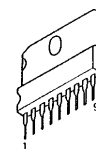
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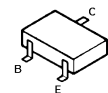
TDA7269



TDA6107Q



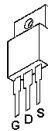
TDA 8139



BC 847B
BC 857B
BCR141
BCR191
DTC113ZK
DTC144EK
TN1401



ST24C08-M
TS3702CD



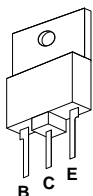
STP6 NA60F1



BT806 -600C



MC7812/CT



BD241C



BC 337
BC 546B
BC 547B



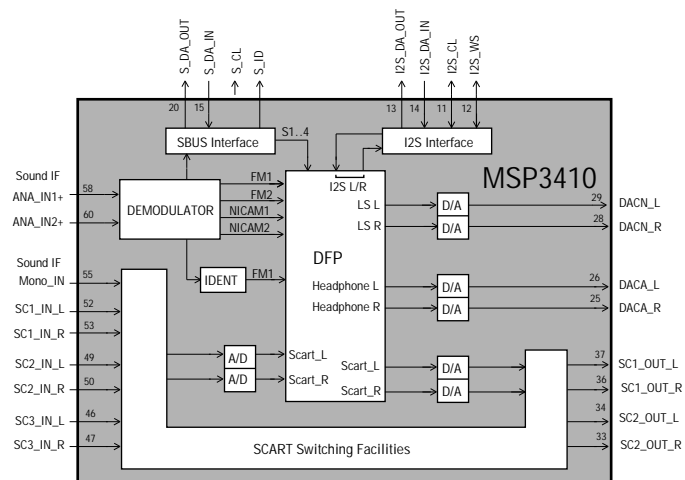
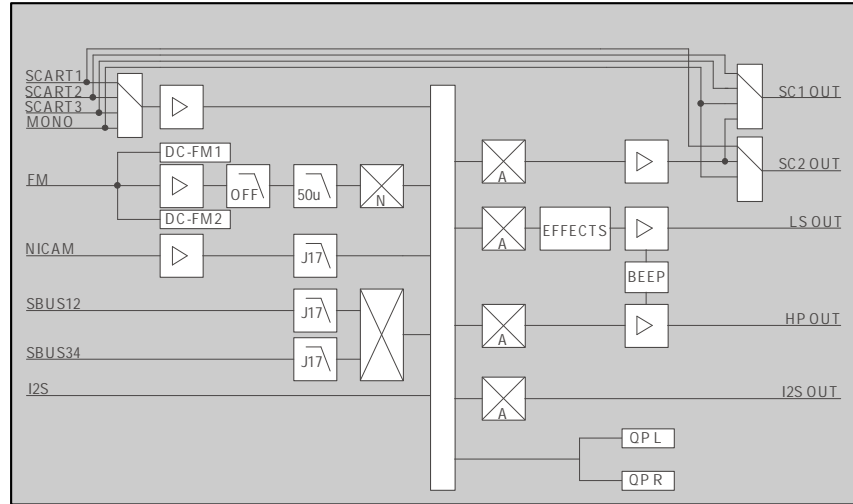
BF 422
BF423
2SA1020Y
2SC2236Y



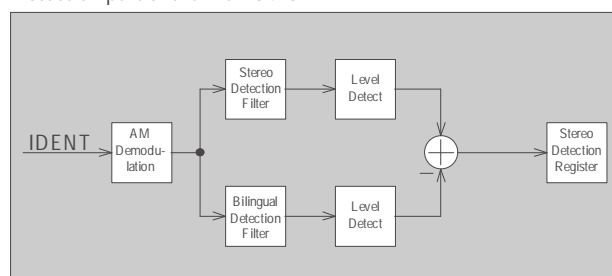
MPS750

INTEGRATED CIRCUITS BLOCK DIAGRAMS - SYNOPTIQUES INTERNES DES CIRCUITS INTEGRES - INTEGRIERTE SCHALTUNGEN BLOCKSCHALTBIlder SCHEMA A BLOCCHI DEI CIRCUITI INTEGRATI - VISTA INTERNA DE LOS CIRCUITOS INTEGRADOS

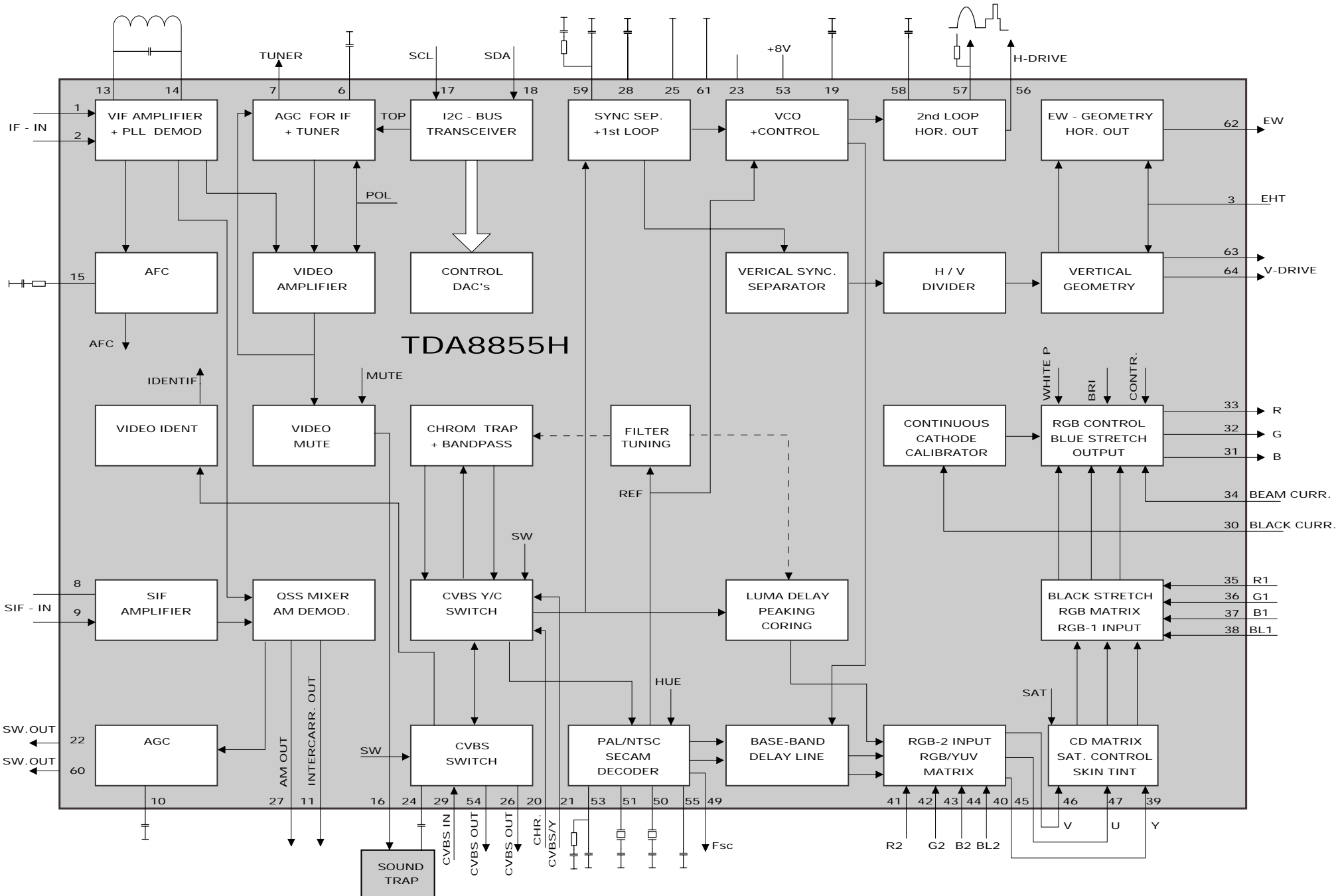
Audio baseband processing of the MSP3410



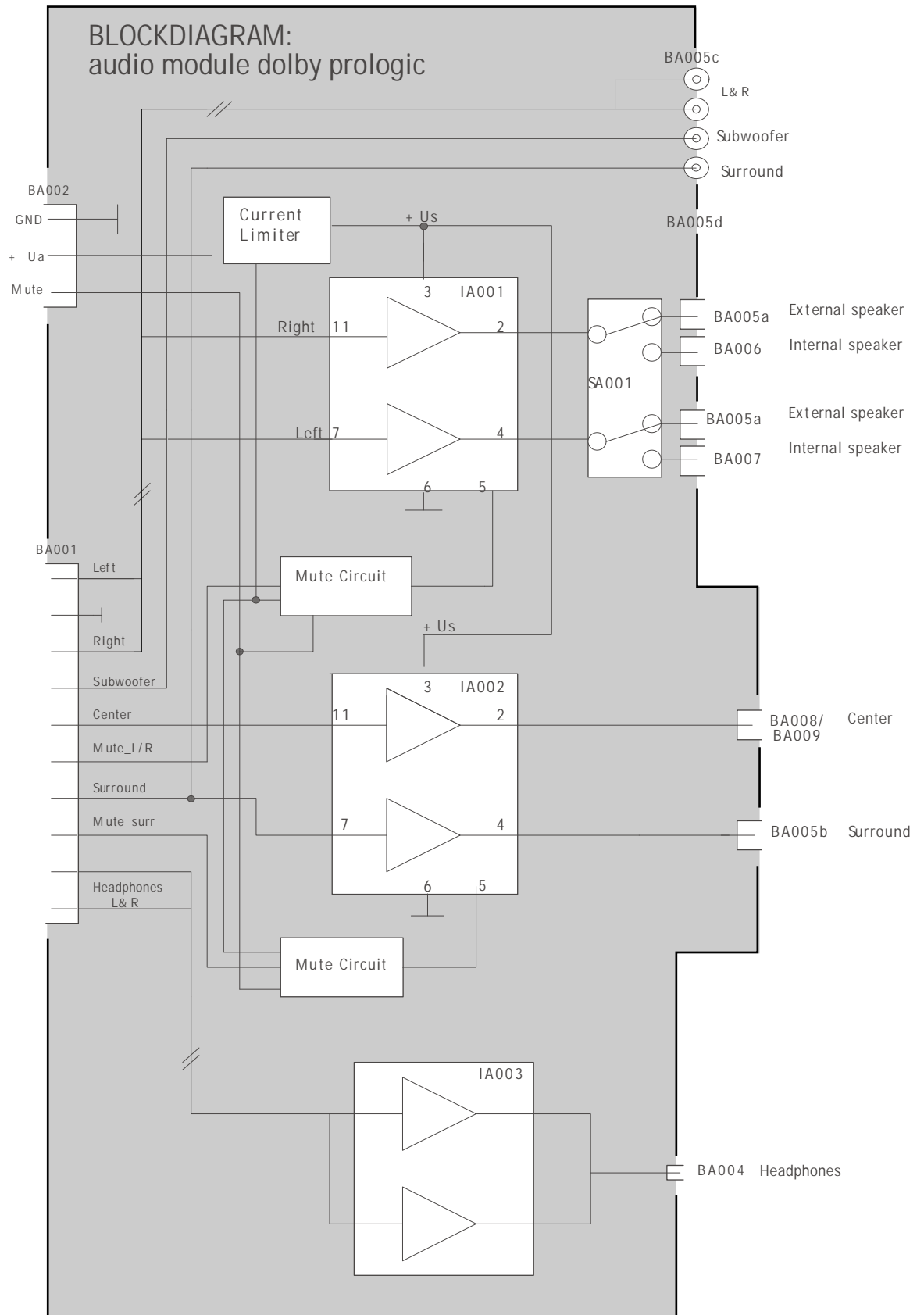
Detection part of the MSP 3410



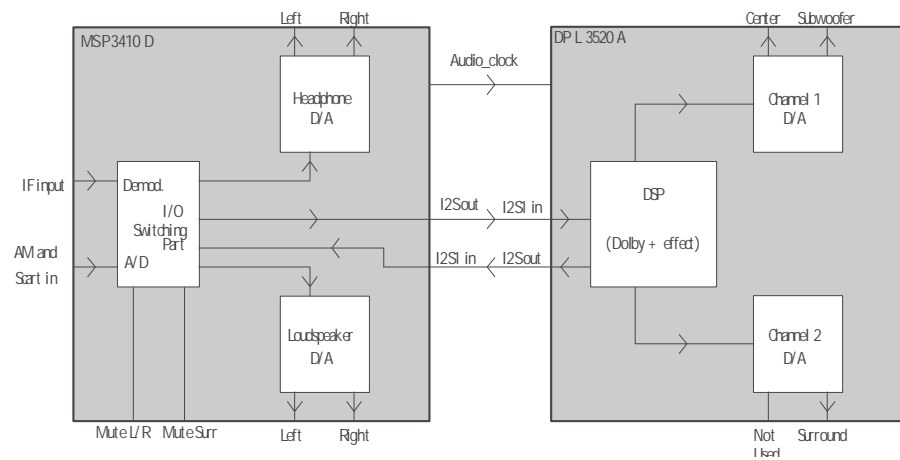
IV01 TDA 8855H



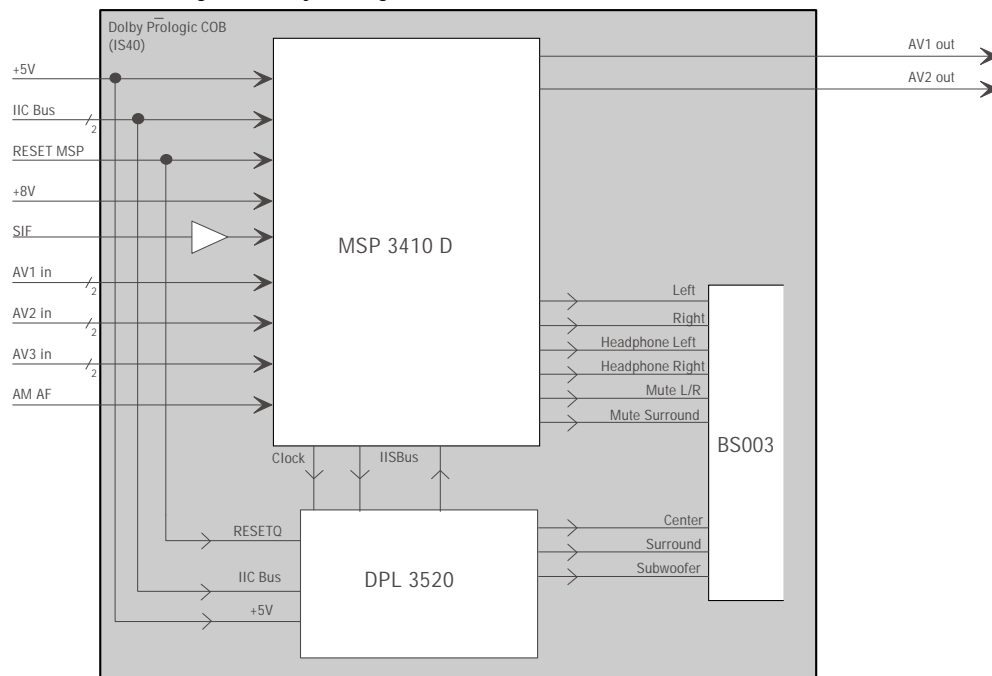
BLOCK DIAGRAM (AUDIO MODULE DOLBY PROLOGIC)
SCHEMA SYNOPTIQUE (AUDIO MODULE DOLBY PROLOGIC)
BLOCKSCHALTBIID (AUDIO MODULE DOLBY PROLOGIC)
SCHEMA A BLOCCI (AUDIO MODULE DOLBY PROLOGIC)
ESQUEMA DE BLOQUES (AUDIO MODULE DOLBY PROLOGIC)



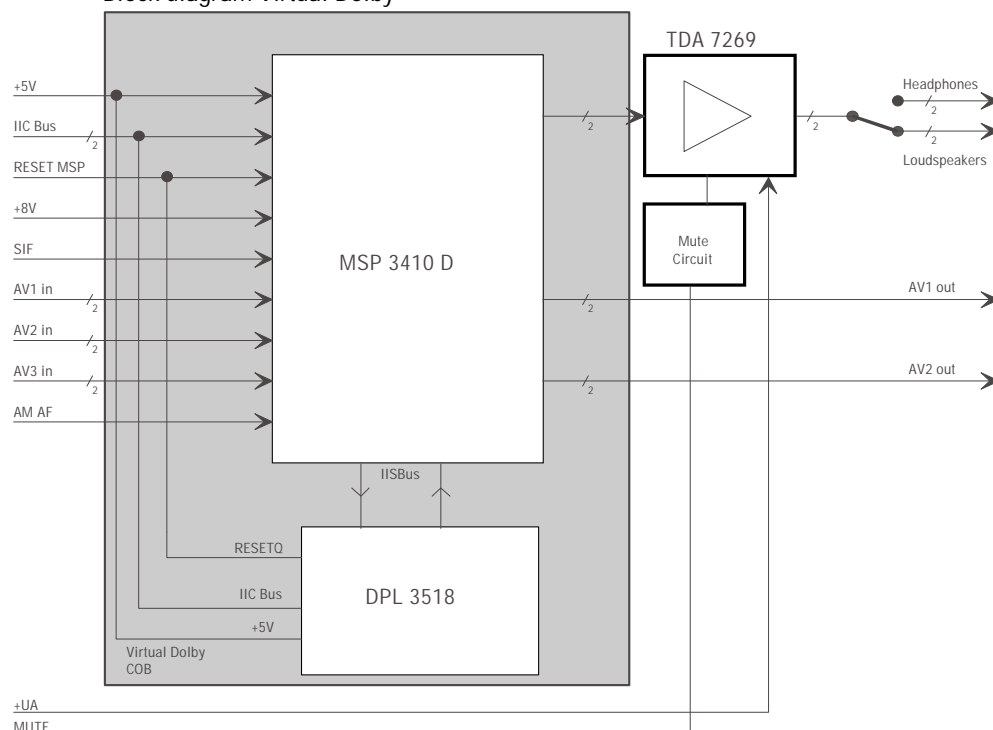
Interface requirement audio part with Dolby Prologic



Block diagram Dolby Prologic



Block diagram Virtual Dolby





IRIS REPAIR CODING SYSTEM

SYMPTOM CODE TABLE



	1	NO ACTION	2	LEVEL	3	QUALITY	4	NOISE	5	UNSTABLE	6	RECORDING & PHYSICAL PROBLEMS	7	SPECIAL FUNCTIONS	8	OTHER CONDITIONS
	1	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250
	2	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350
	3	310	320	330	340	350	360	370	380	390	400	410	420	430	440	450
	4	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550
	5	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650
	6	610	620	630	640	650	660	670	680	690	700	710	720	730	740	750
	7	710	720	730	740	750	760	770	780	790	800	810	820	830	840	850
	8	810	820	830	840	850	860	870	880	890	900	910	920	930	940	950
	9	910	920	930	940	950	960	970	980	990	1000	1010	1020	1030	1040	1050
	10	1010	1020	1030	1040	1050	1060	1070	1080	1090	1100	1110	1120	1130	1140	1150
	11	1110	1120	1130	1140	1150	1160	1170	1180	1190	1200	1210	1220	1230	1240	1250
	12	1210	1220	1230	1240	1250	1260	1270	1280	1290	1300	1310	1320	1330	1340	1350
	13	1310	1320	1330	1340	1350	1360	1370	1380	1390	1400	1410	1420	1430	1440	1450
	14	1410	1420	1430	1440	1450	1460	1470	1480	1490	1500	1510	1520	1530	1540	1550
	15	1510	1520	1530	1540	1550	1560	1570	1580	1590	1600	1610	1620	1630	1640	1650
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	17	1710	1720	1730	1740	1750	1760	1770	1780	1790	1800	1810	1820	1830	1840	1850
	18	1810	1820	1830	1840	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940	1950
	19	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050
	20	2010	2020	2030	2040	2050	2060	2070	2080	2090	2100	2110	2120	2130	2140	2150
	21	2110	2120	2130	2140	2150	2160	2170	2180	2190	2200	2210	2220	2230	2240	2250
	22	2210	2220	2230	2240	2250	2260	2270	2280	2290	2300	2310	2320	2330	2340	2350
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	81	8110	8120	8130	8140	8150	8160	8170	8180	8190	8200	8210	8220	8230	8240	8250
	82	8210</														

SECTION CODES

ANT	ANTENNA SECTION	HDD	HARD DISC DRIVE	RFU	BOOSTER/RF UNIT
APA	AUDIO PROCESSING/ANALOG	HFS	HIGH FREQUENCY SECTION (RF)	RHD	ROTARY HEAD(S)
APD	AUDIO PROCESSING/DIGITAL	HOL	CASSETTE HOLDER	SFT	SOFTWARE (TAPE, DISC, ETC.)
APR	SIGNAL PROCESSING (ANALOG)	IDS	INFORMATION DISPLAY SECTION	SHD	STATIONARY HEAD(S)
ARM	ARM MECHANISM	IFC	IF-CIRCUIT	SLD	SLED MECHANISM
BCH	BATTERY CHARGE	IMG	IMAGE DISPLAY UNIT	SNS	SENSOR UNIT
BZL	BEZEL	INC	INTERNAL CONNECTOR	SPK	SPEAKER
CBT	CABINET	INP	SIGNAL INPUT SECTION	SRS	SUPPLY REEL SECTION
CHA	CHASSIS	KBD	KEYBOARD (SEPARATE)	STA	STATIC BLOCK
CLK	CLOCK/TIMER SECTION	LDG	LOADING MECHANISM	SVO	SERVO SECTION
CPA	COLOUR PROCESSING/ANALOG	LNM	LENS MECHANISM	SYS	SYSTEM CONTROL SECTION
CPD	COLOUR PROCESSING/DIGITAL	MEM	MEMORY CIRCUIT	TDM	TAPE DRIVE MECHANISM
CRT	PICTURE TUBE	MIC	MICROPHONE SECTION	THR	THREADING MECHANISM
CTR	CONTROL PANEL	OUT	SIGNAL OUTPUT SECTION	TIM	TIMER SECTION
DDM	DISC DRIVE MECHANISM	PFM	PAPER FEED MECHANISM	TNR	TENSION REGULATOR
DFL	DEFLECTION CIRCUIT	PIN	PINCH ROLLER/LEVER	TPT	TAPE PATH
DPR	SIGNAL PROCESSING (DIGITAL)	PRG	PROGRAMMING SECTION	TRS	TAKE-UP REEL SECTION
ERA	ERASE CIRCUIT	PRI	PRINT BLOCK	TUN	TUNING SECTION
EXC	EXTERNAL CONNECTOR	PRT	PROTECTION CIRCUIT	TXT	TEXT PROCESSING
FDD	FLOPPY DISC DRIVE	PSU	POWER SUPPLY	VPA	VIDEO PROCESSING/ANALOG
FLX	FLEXIBLE PCB	PUD	PICK-UP DEVICE	VPD	VIDEO PROCESSING/DIGITAL
FMW	FIRMWARE	PWA	POWER AMP SECTION	VWF	VIEWFINDER
FPK	FOCUS PACK	REM	REMOTE CONTROL SECTION	WIR	LEAD WIRE
HCM	HEAD CARRIAGE MECHANISM	RFM	RIBBON FEED MECHANISM	XXX	CABINET/COSMETIC PARTS

DEFECT CODES

MECHANICAL		ELECTRICAL	
A	WORN OUT	N	EXHAUSTED, LOW EMISSION
B	DIRTY, CLOGGED	O	BURNT, ARCING, MISSING PIXELS
C	MISALIGNED	P	MISALIGNED
D	CUT, BROKEN	Q	SHORT
E	DEFORMED	R	OPEN
F	SNAPPED	S	LEAKING
G	SCRATCHED	T	BAD CONTACT, CONNECTION
H	CRACKED, PEELED, CORRODED	U	OPEN PATTERN
I	LOOSE	V	CRACKED PCB
J	SHAKY, UNSTABLE	W	COLD OR NO SOLDERING
K	LEAKING	X	BRIDGED SOLDERING
L	DRY (NO LUBRICANT)	Y	WRONG COMPONENT
M	FOREIGN OBJECT	Z	MISSING COMPONENT
		1	SOFTWARE BUG

REPAIR CODES

A	REPLACEMENT	N	MAINTENANCE
B	MECHANICAL ALIGNMENT	O	REFURBISHING
C	ELECTRICAL ALIGNMENT	P	PREVENTIVE PARTS REPLACEMENT
D	RESOLDERING	Q	PREVENTIVE ACTION WITHOUT PARTS REPLACEMENT
E	CLEANING	U	EXPLANATION FOR CUSTOMER
F	LUBRICATION	V	ESTIMATION REFUSED
G	REPAIRED ELECTRICAL PARTS	W	ESTIMATION WITH PARTS
H	REPAIRED MECHANICAL PARTS	X	ESTIMATION WITHOUT PARTS
I	S/B MODIFICATION		
J	REMOVED COMPONENT (S)	Y	RETURN WITHOUT REPAIR
K	ADDED COMPONENTS	Z	SET EXCHANGE
L	FUNCTIONAL CHECK		
M	SPECIFICATION MEASUREMENT		

FLAG: INDICATES THE ONE MAJOR SYMPTOM/PART COMBINATION BY '1'

EXAMPLE OF USE :

FLAG	SYMPTOM CODE	PART NO	REF. NO	SECTION/PCB	DEFECT CODE	REPAIR CODE	QTY
<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
1	1 4 1 2	1 1 1 1 1 1 1 1	R 1 2 3 .	Y A 2 2 .	R	A	1
.	3 6 4 1	3 4 5 6 7 8 9 X X	1 1 1 . .	T D M . .	C	B	0

CÓDIGOS DE SECCIÓN

ANT	SECCIÓN DE LA ANTENA	HDD	EXCITADOR DEL DISCO DURO	RFU	AMPLIFICADOR/UNIDAD RF
APA	PROCESADO DE AUDIO ANALÓGICO	HFS	SECCIÓN DE ALTA FRECUENCIA	RHD	CABEZAS ROTATIVAS
APD	PROCESADO DE AUDIO DIGITAL	HOL	SOPORTE DE CASSETTE	SFT	SOFTWARE (CINTA, DISCO, ETC)
APR	PROCESADO DE SEÑALES (ANALÓGICO)	IDS	SECCIÓN DEL DISPLAY DE INFORMACIÓN	SHD	CABEZAS FIJAS
ARM	MECANISMO DEL BRAZO	IFC	CIRCUITO FI	SLD	MECANISMO DE SEGUIMIENTO
BCH	CARGA DE BATERÍA	IMG	UNIDAD DE VISUALIZACIÓN DE IMÁGENES	SNS	UNIDAD DE DETECCIÓN
BZL	CARÁTULA	INC	CONECTOR INERNO	SPK	ALTAVOZ
CBT	MUEBLE	INP	SECCIÓN DE ENTRADA DE SEÑALES	SRS	SECCIÓN DEL CARRETE DE SUMINISTRO
CHA	CHASIS	KBD	TECLADO	STA	BLOQUE ESTÁTICO
CLK	SECCIÓN DE RELOJ	LDG	MECANISMO DE CARGA	SVO	SECCIÓN DE SERVO
CPA	PROCESADO DE COLOR ANALÓGICO	LNM	MECANISMO DELENTE	SYS	SECCIÓN DEL SISTEMA DE CONTROL
CPD	PROCESADO DE COLOR DIGITAL	MEM	SECCIÓN DE MEMORIA	TDM	MECANISMO DE ACCIONAMIENTO DE LA CINTA
CRT	TUBO DE IMAGEN	MIC	SECCIÓN DE MICRÓFONO	THR	MECANISMO DE ENHEBRADO
CTR	PANEL DE CONTROL	OUT	SECCIÓN DE SALIDA DE SEÑALES	TIM	SECCIÓN DE TEMPORIZACIÓN
DDM	SECCIÓN DE ACCIONAMIENTO DEL DISCO	PFM	MECANISMO DE ALIMENTACIÓN DEL PAPEL	TNR	REGULADOR DE LA TENSIÓN DE LA CINTA
DFL	CIRCUITO DE DEFLEXIÓN	PIN	RODILLO/PALANCA DE APRIETE	TPT	CAMINO DE LA CINTA
DPR	PROCESADO DE SEÑALES (DIGITAL)	PRG	SECCIÓN DE PROGRAMACIÓN	TRS	SECCIÓN DEL CARRETE DE RECOGIDA
ERA	CIRCUITO DE BORRADO	PRI	BLOQUE DE IMPRESOR	TUN	SECCIÓN DE SINTONIZACIÓN
EXC	CONECTOR EXTERNO	PRT	CIRCUITO DE PROTECCIÓN	TXT	PROCESADO DE TEXTOS
FDD	EXCITADOR DEL FLOPPY DISC	PSU	ALIMENTACIÓN	VPA	PROCESADO DE VIDEO ANALÓGICO
FLX	PLACA FLEXIBLE	PUD	DISPOSITIVO CAPTADOR	VPD	PROCESADO DE VIDEO DIGITAL
FMW	PROGRAMACIÓN FIJA	PWA	SECCIÓN DEL AMP DE POTENCIA	VWF	VISOR
FPK	CONJUNTO DE ENFOQUE	REM	SECCIÓN DEL CONTROL REMOTO	WIR	CABLE
HCM	MECANISMO DE SOPORTE DE LA CABEZA	RFM	MECANISMO DE ALIMENTACIÓN DE LA CINTA	XXX	PIEZAS ESTÉTICAS

CÓDIGOS DE LOS DEFECTOS

MECÁNICO		ELÉCTRICO	
A	GASTADO	N	AGOTADO, EMISIÓN DÉBIL
B	SUCIO, MANCHADO	O	QUEMADO, FORMACIÓN DE ARCO PIXELS QUE FALTAN
C	MAL AJUSTADO	P	MAL AJUSTADO
D	CORTADO, DEFECTUOSO	Q	CORTOCIRCUITO
E	DEFORMADO	R	ABIERTO
F	ENGANCHADO, BLOQUEADO	S	PÉRDIDA
G	RASGUÑO	T	MAL CONTACTO, SOLDADURA
H	HENDEURA, PELADO, CORROSIÓN	U	CIRCUITO ABIERTO
I	SEPARACIÓN	V	PLACA HENDIDA
J	INESTABILIDAD	W	SOLDADURA SECA O QUE FALTA
K	PÉRDIDA	X	SOLDADURA EN PUENTE
L	SECO (SIN LUBRIFICANTE)	Y	COMPONENTE EQUIVOCADO
M	CUERPO EXTRAÑO	Z	COMPONENTE QUE FALTA
		1	ERROR DEL SOFTWARE

CÓDIGOS DE REPARACIÓN

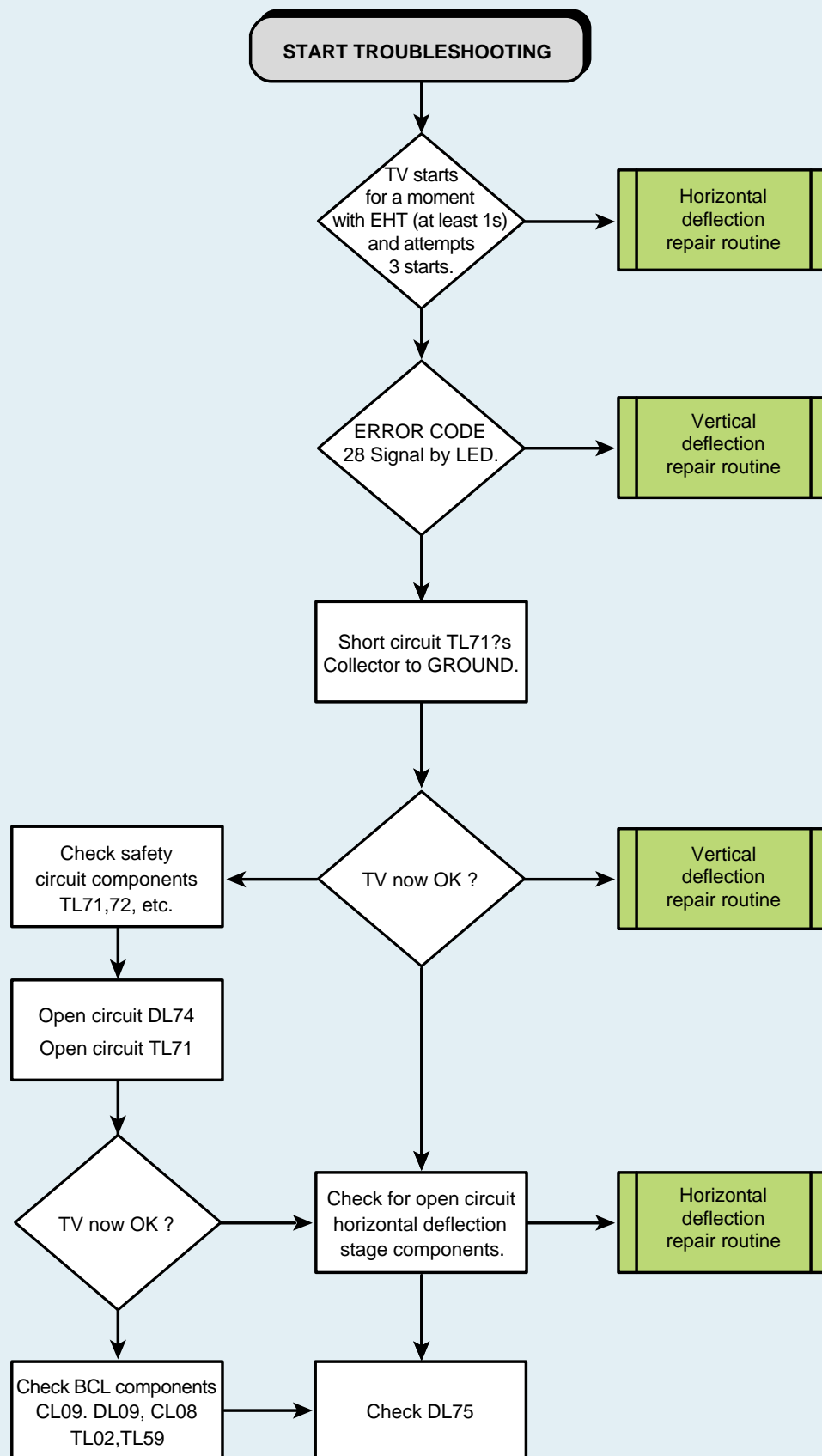
A	SUSTITUCIÓN	N	MANTENIMIENTO
B	AJUSTE MECÁNICO	O	REPULIR
C	AJUSTE ELÉCTRICO	P	SUSTITUCIÓN PREVENTIVA DE COMPONENTES
D	RESOLDADURA	Q	ACCIÓN PREVENTIVA SIN SUSTITUCIÓN DE COMPONENTES
E	LIMPIEZA	U	EXPLICACIÓN AÑADIDA
F	ENGRASE	V	PRESUPUESTO RECHAZADO
G	COMPONENTES ELÉCTRICOS REPARADOS	W	PRESUPUESTO CON COMPONENTES
H	COMPONENTES MECÁNICOS REPARADOS	X	PRESUPUESTO SIN COMPONENTES
I	MODIFICACIÓN SEGÚN BOLETÍN DE SERVICIO		
J	COMPONENTES QUITADOS		
K	COMPONENTES AÑADIDOS	Y	DEVUELTO AL CLIENTE SIN REPARACIÓN
L	COMPROBACIÓN FUNCIONAL	Z	CAMBIO DEL APARATO
M	MEDICIÓN DE ESPECIFICACIÓN		

BANDEROLA : INDICA LA ÚNICA Y PRINCIPAL COMBINACIÓN SÍNTOMA/COMPONENTE POR '1'

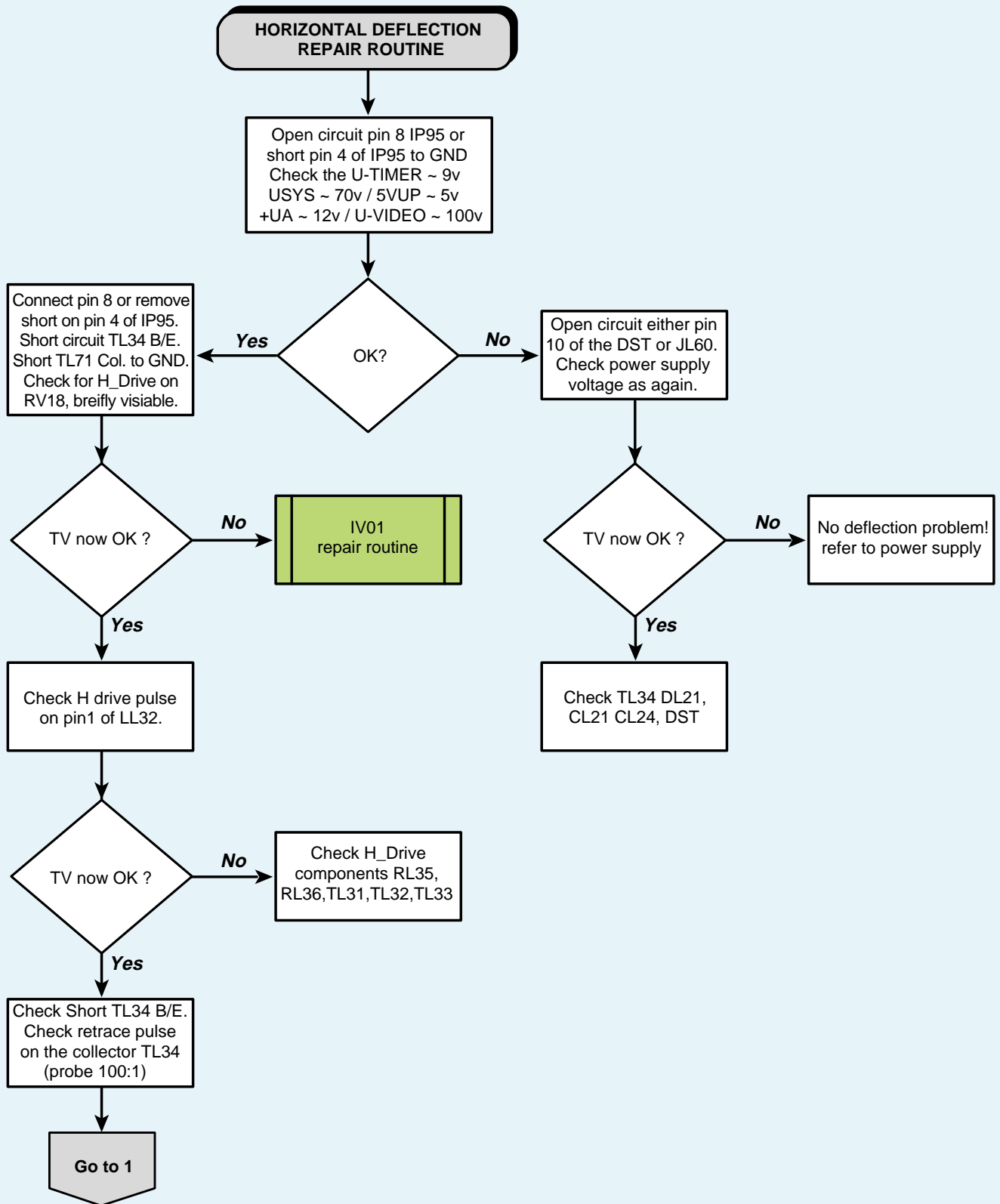
EJEMPLO:

BANDEROLA	CÓDIGO DE SÍNTOMA	CODIGO DE REPUESTO	NÚMERO DE REFERENCIA	COMPONENTE/ PLACA	CÓDIGO DE DEFECTO	CÓDIGO DE REPARACIÓN	CANTIDAD
<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
1	1 4 1 2	1 1 1 1 1 1 1 1	R 1 2 3 .	Y A 2 2 .	R	A	1
.	3 6 4 1	3 4 5 6 7 8 9 X X	1 1 1 . .	T D M . .	C	B	0

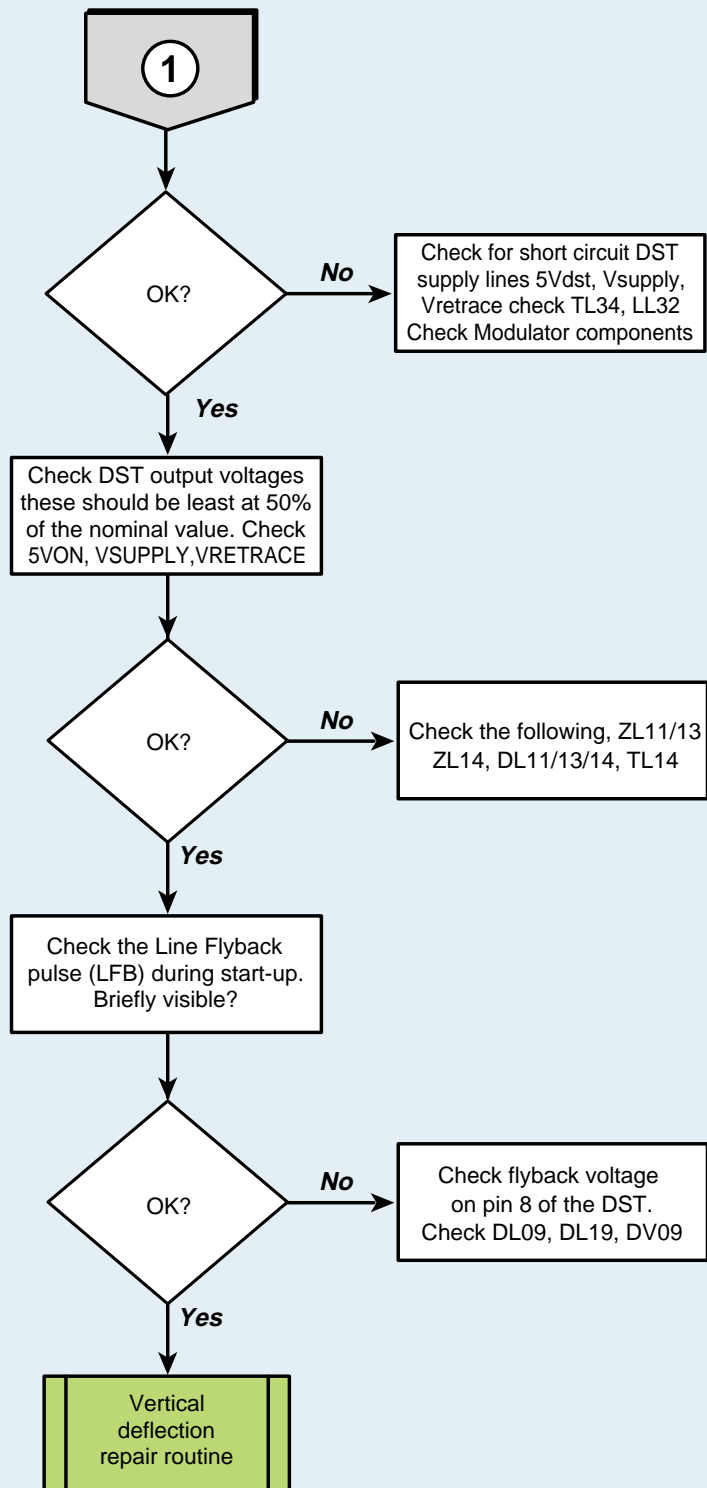
DEFLECTION CIRCUIT CHECK



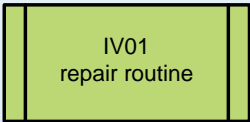
DEFLECTION CIRCUIT CHECK



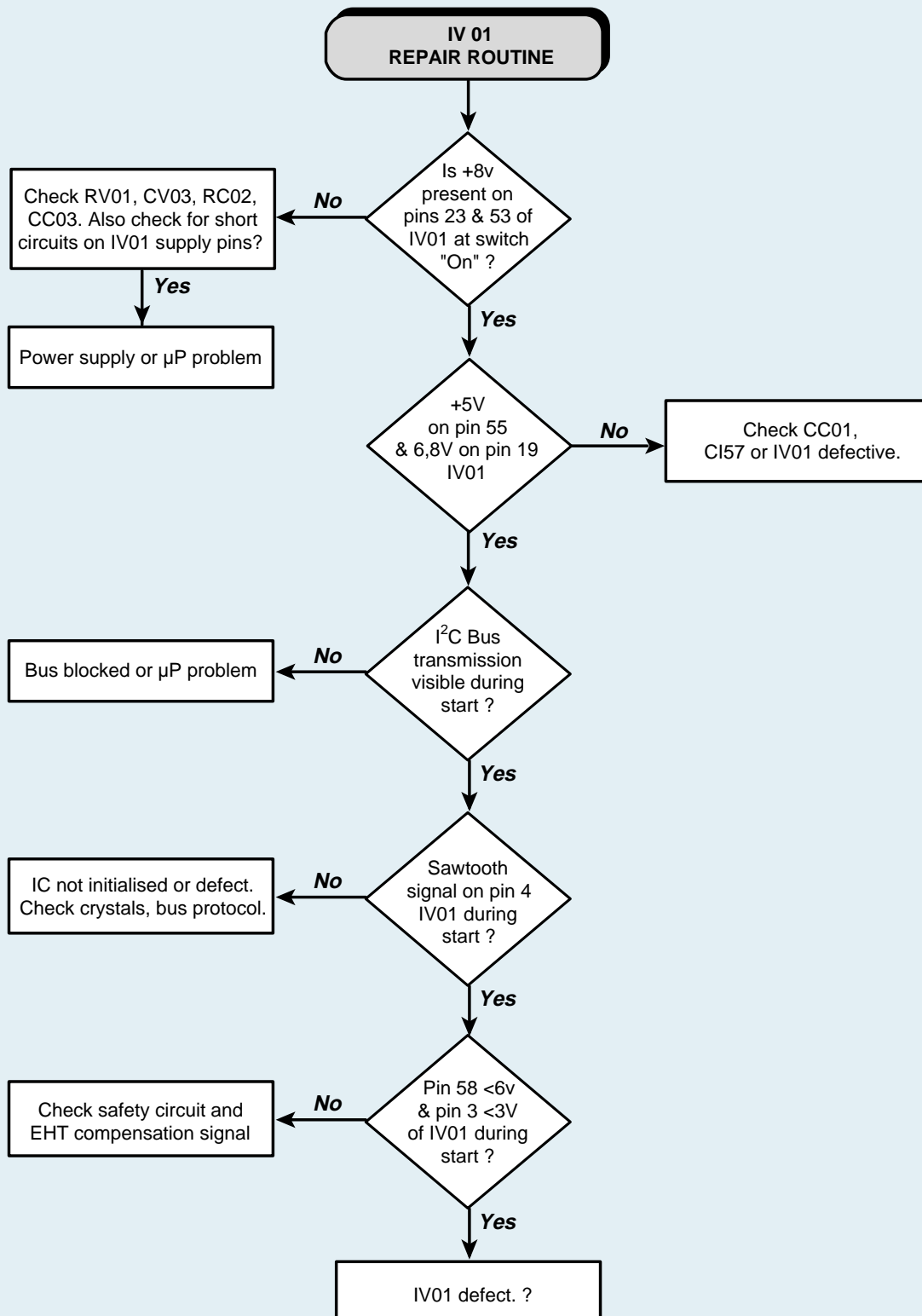
DEFLECTION CIRCUIT CHECK



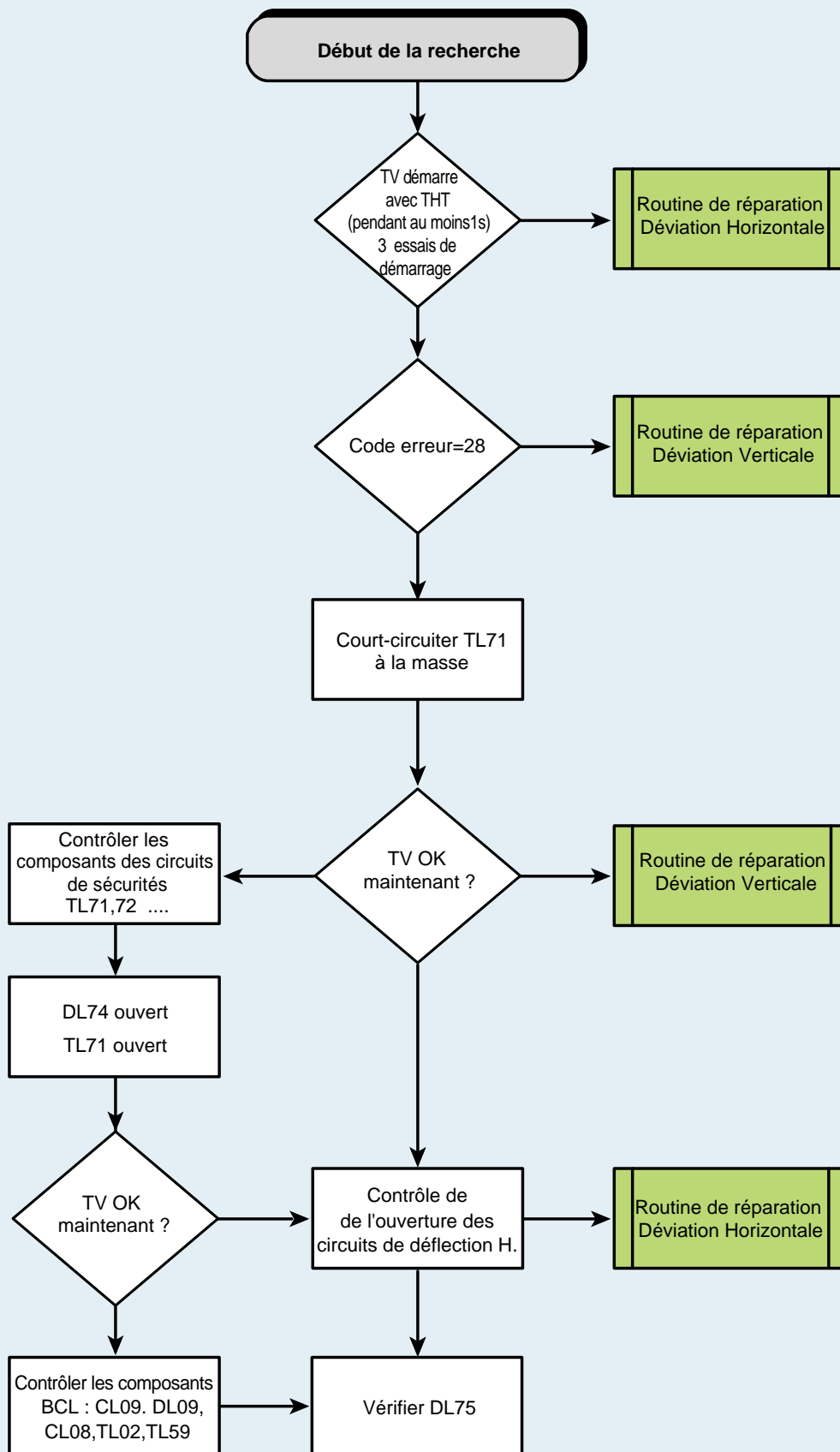
DEFLECTION CIRCUIT CHECK



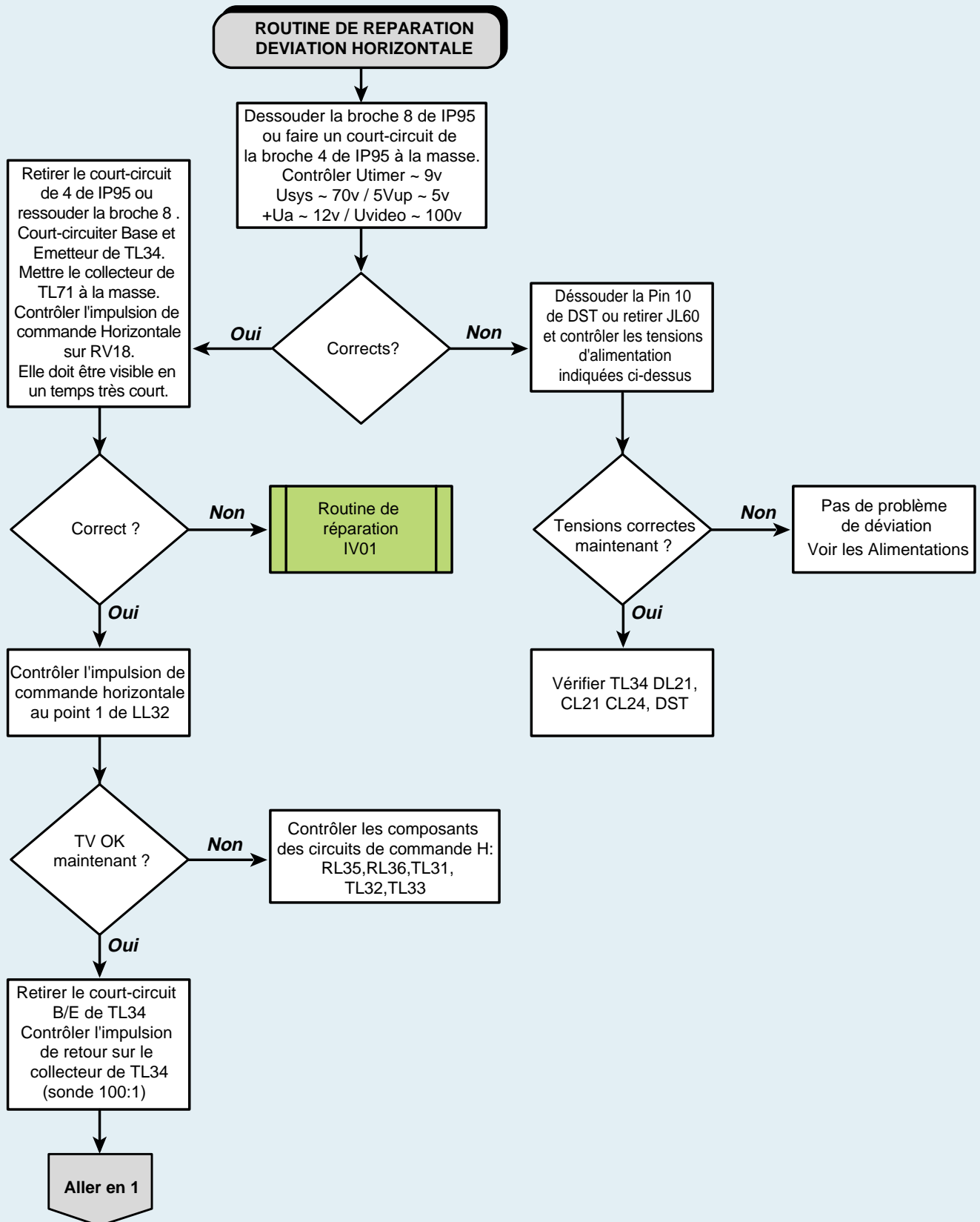
DEFLECTION CIRCUIT CHECK



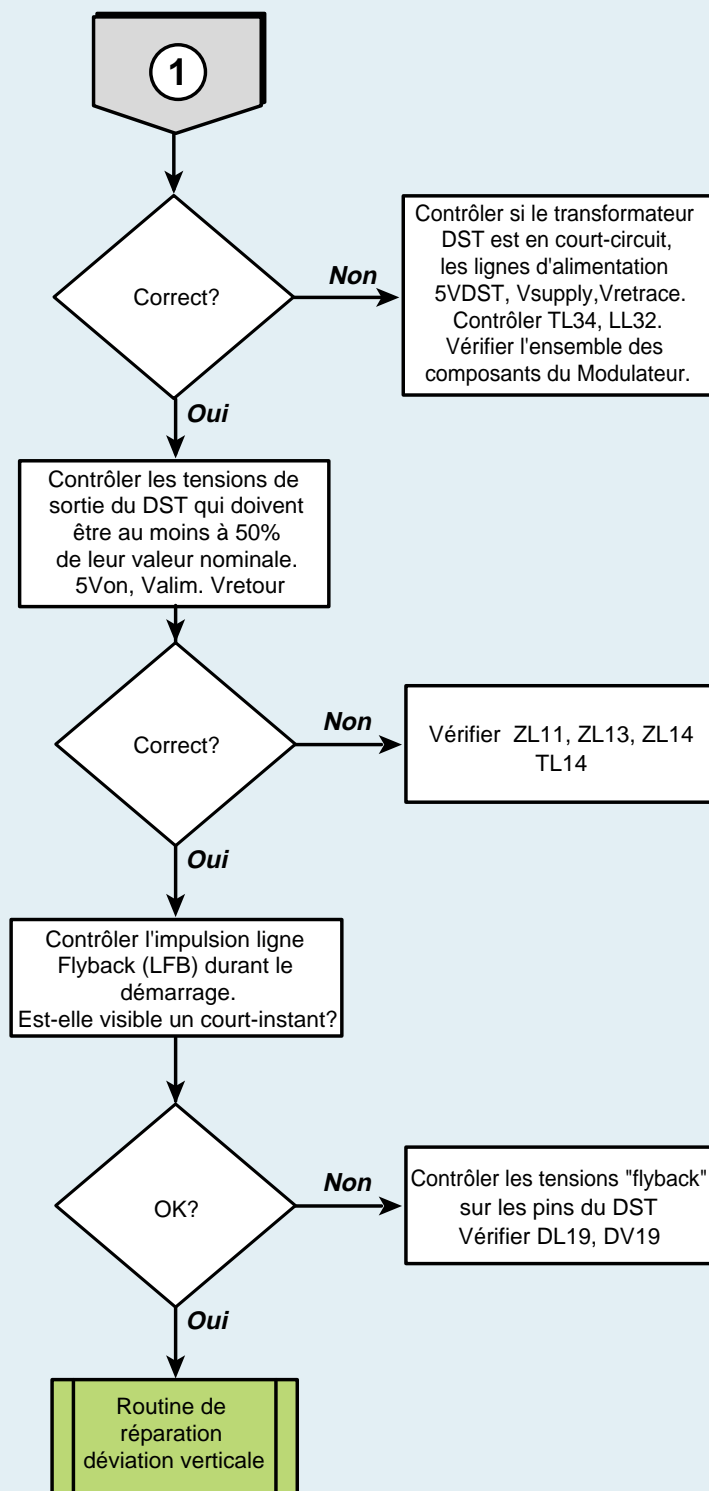
CONTROLES DES CIRCUITS DE DEVIATION



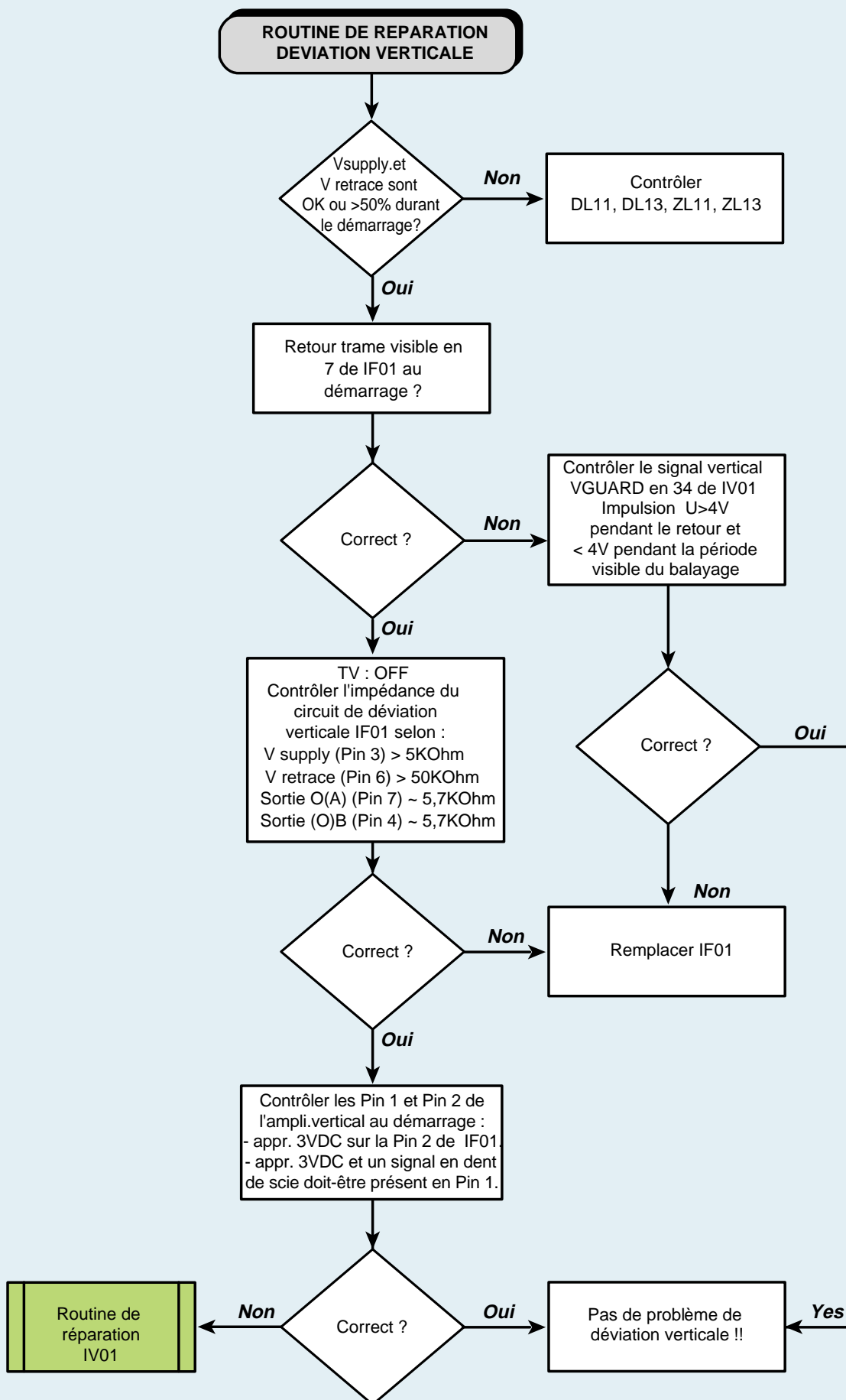
CONTROLES DES CIRCUITS DE DEVIATION



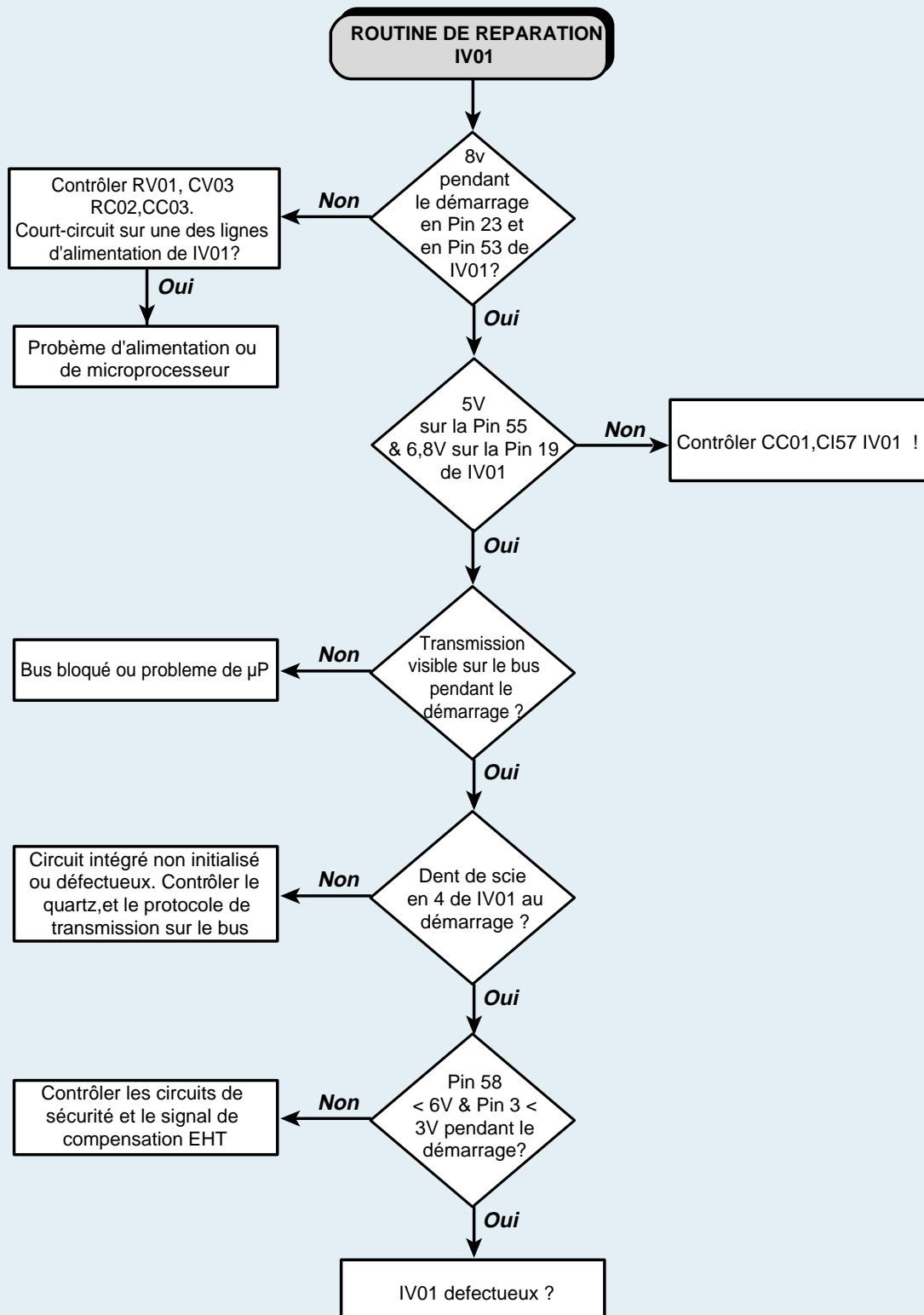
CONTROLES DES CIRCUITS DE DEVIATION



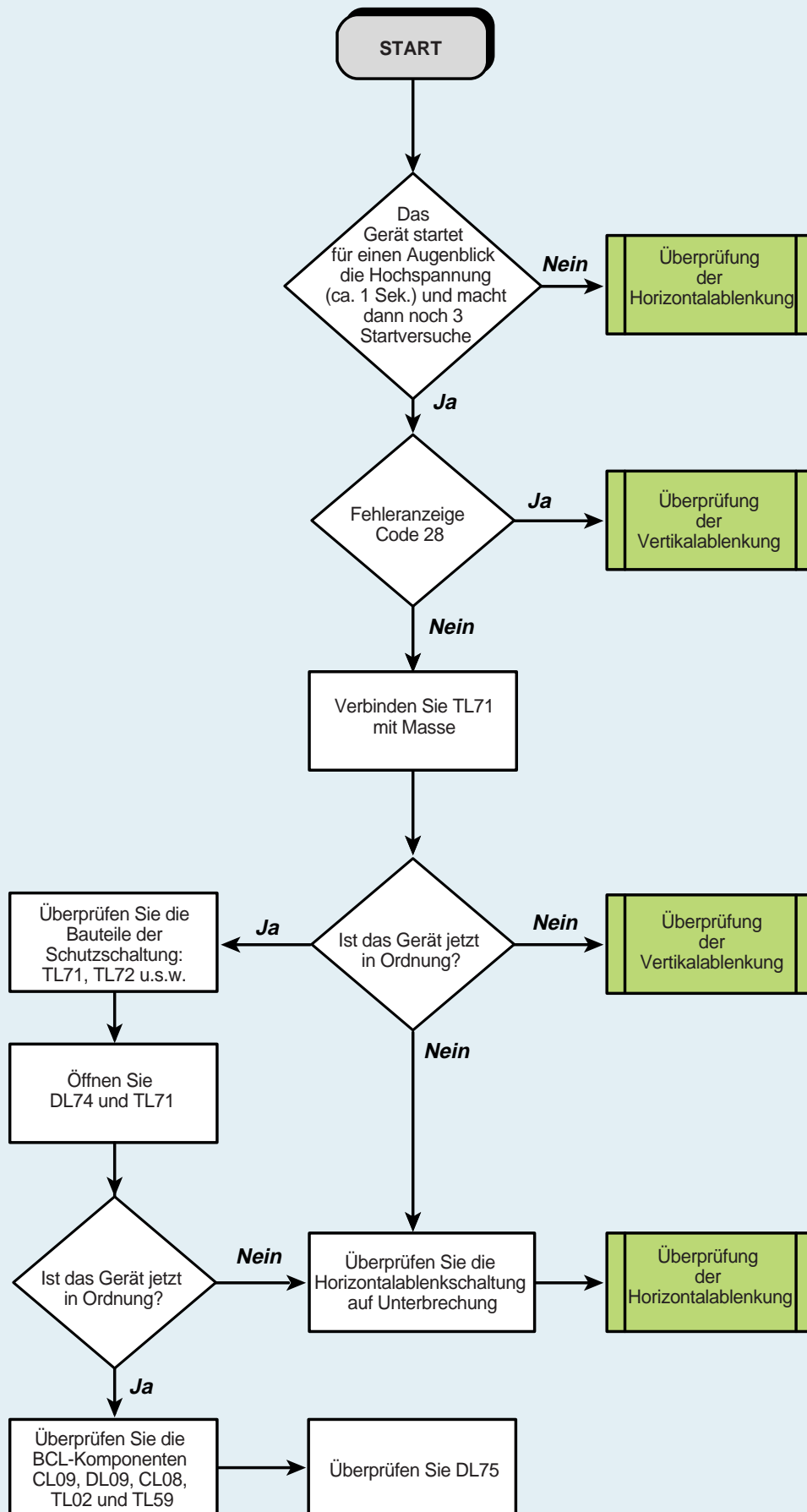
CONTROLES DES CIRCUITS DE DEVIATION



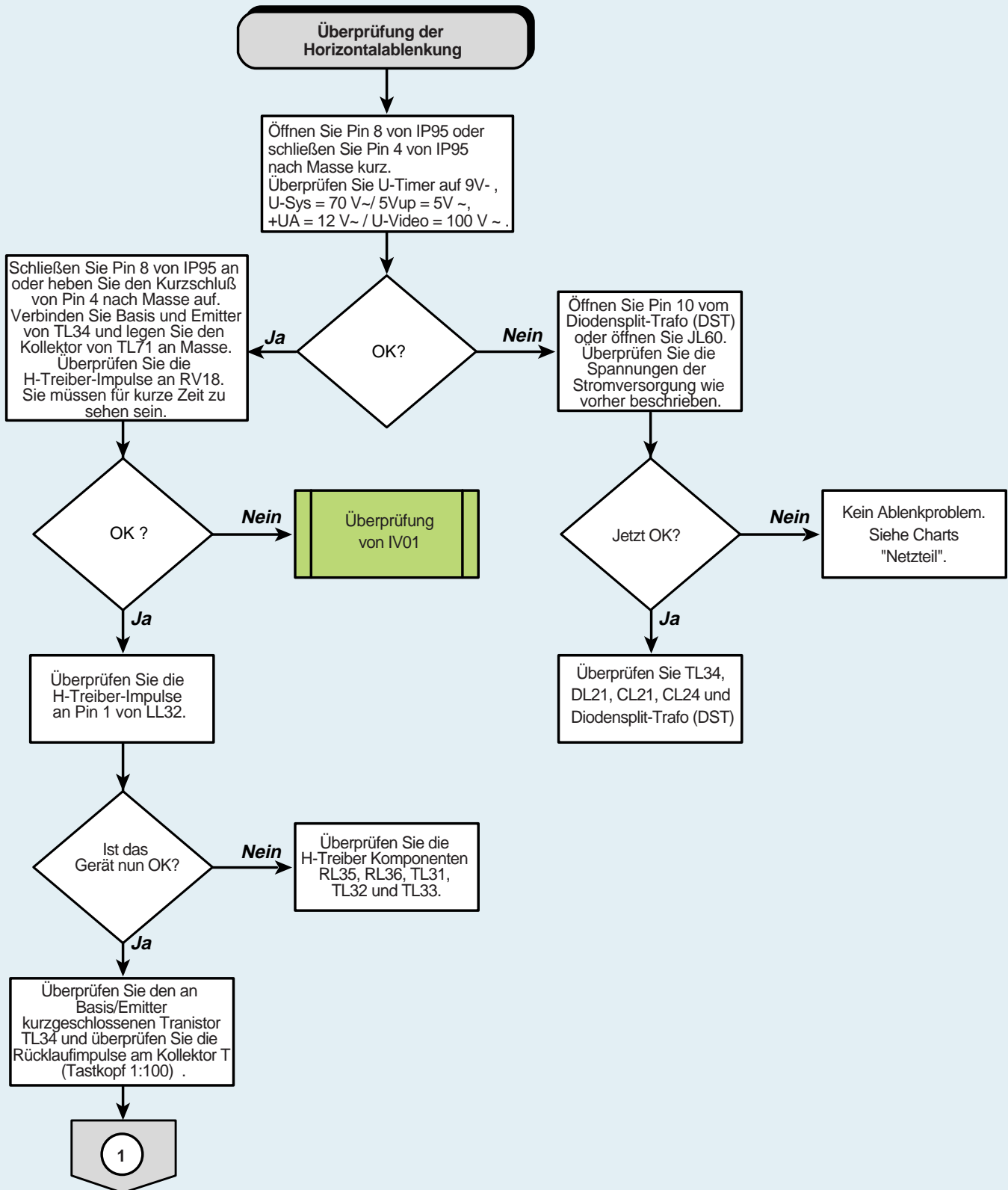
CONTROLES DES CIRCUITS DE DEVIATION



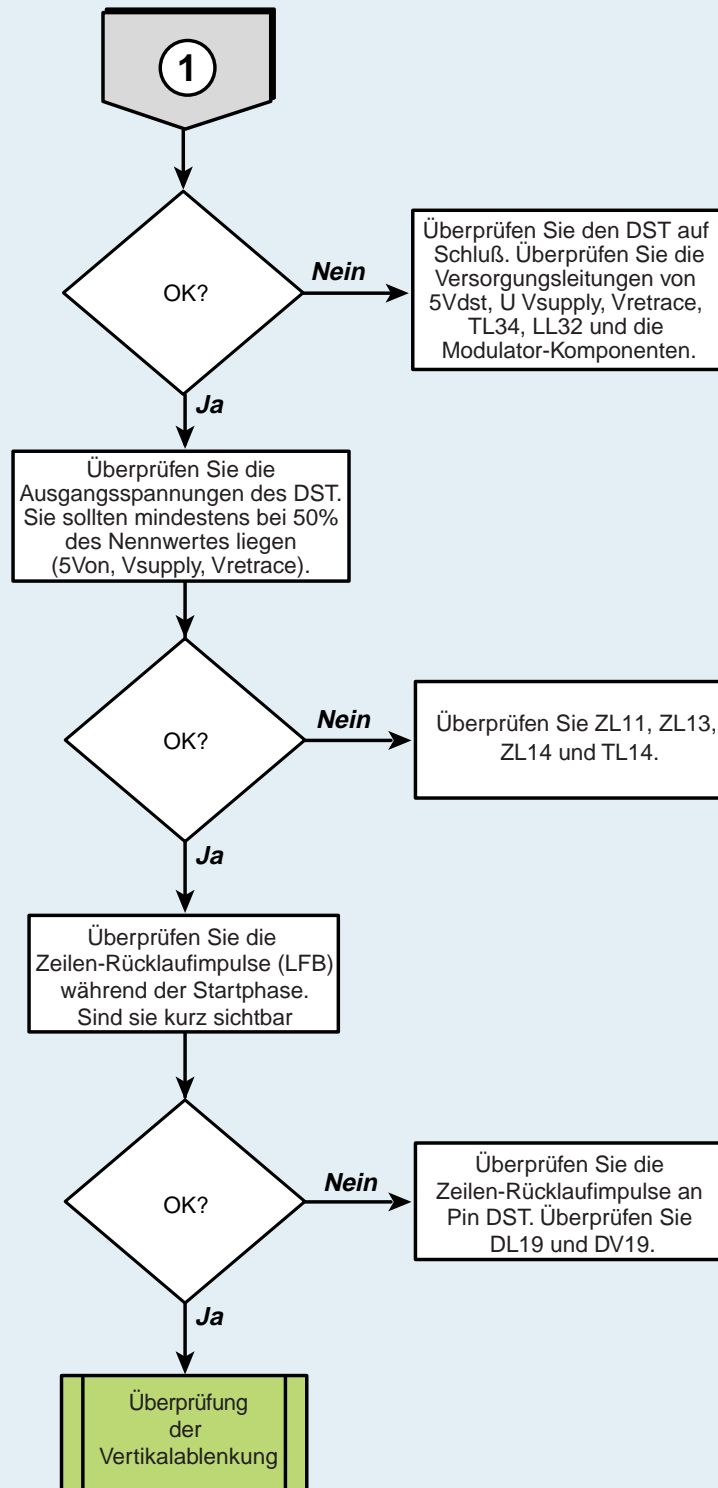
ÜBERPRÜFUNG DER ABLENKSCHALTUNG



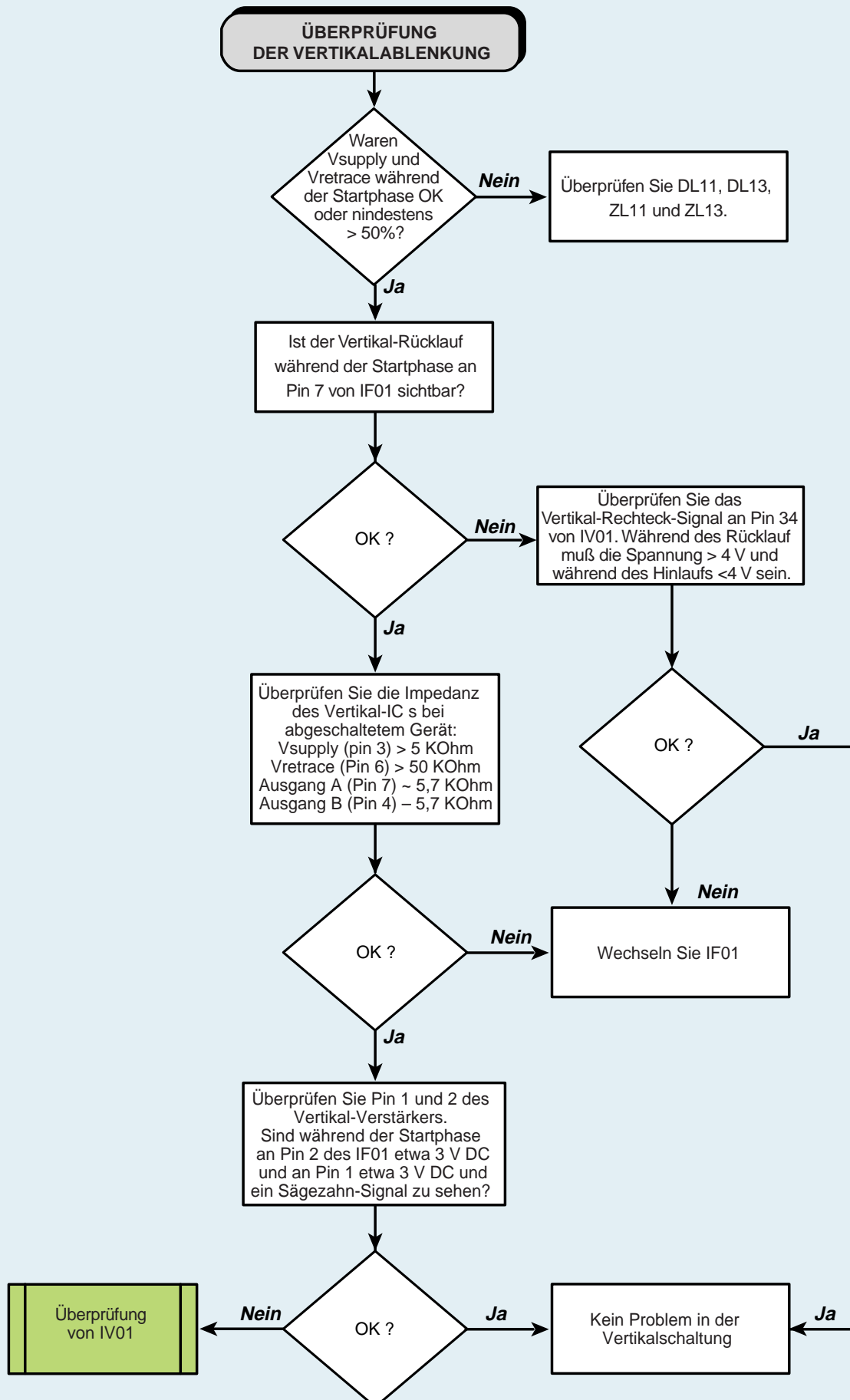
ÜBERPRÜFUNG DER ABLENKSCHALTUNG



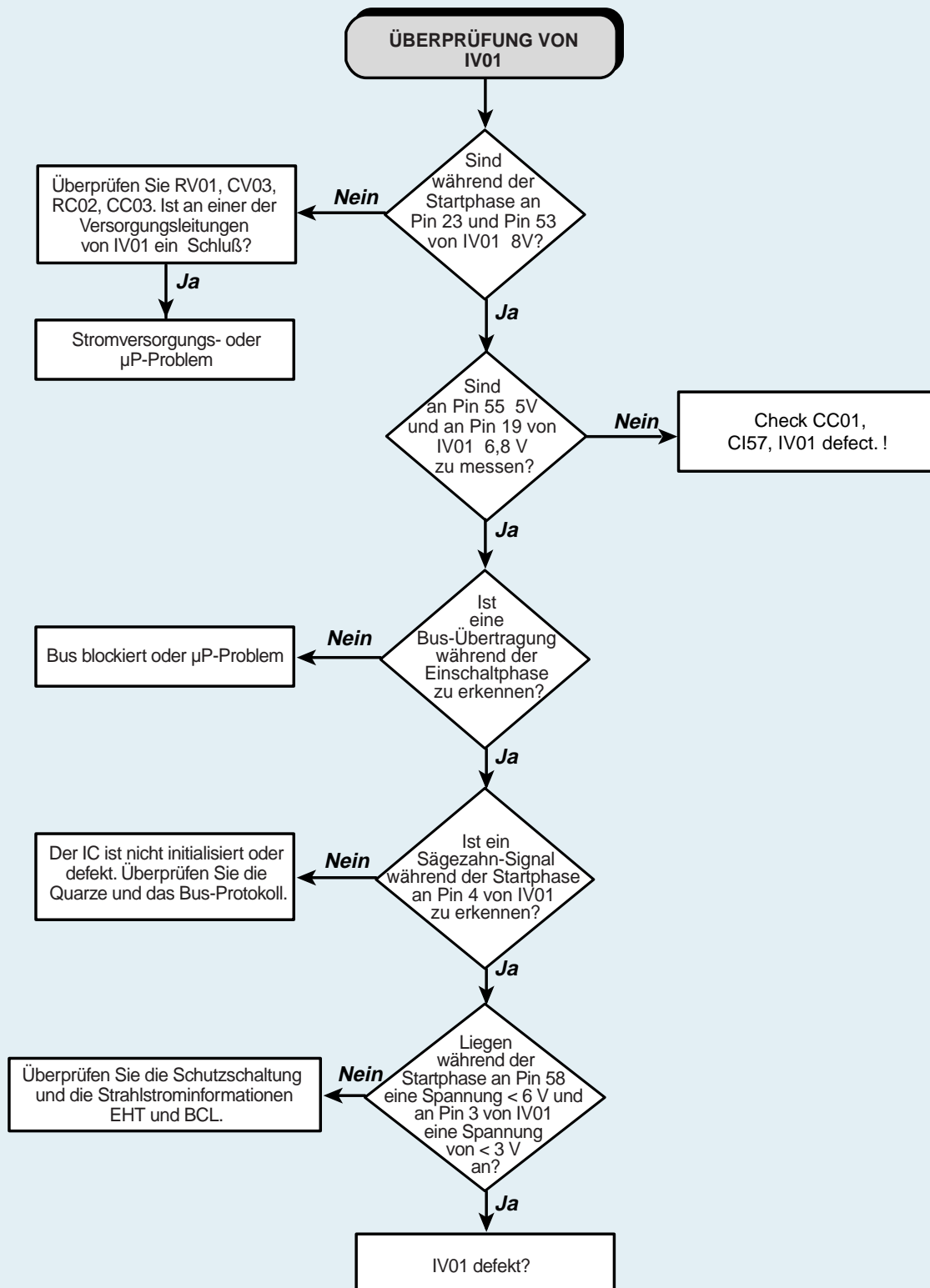
ÜBERPRÜFUNG DER ABLENKSCHALTUNG



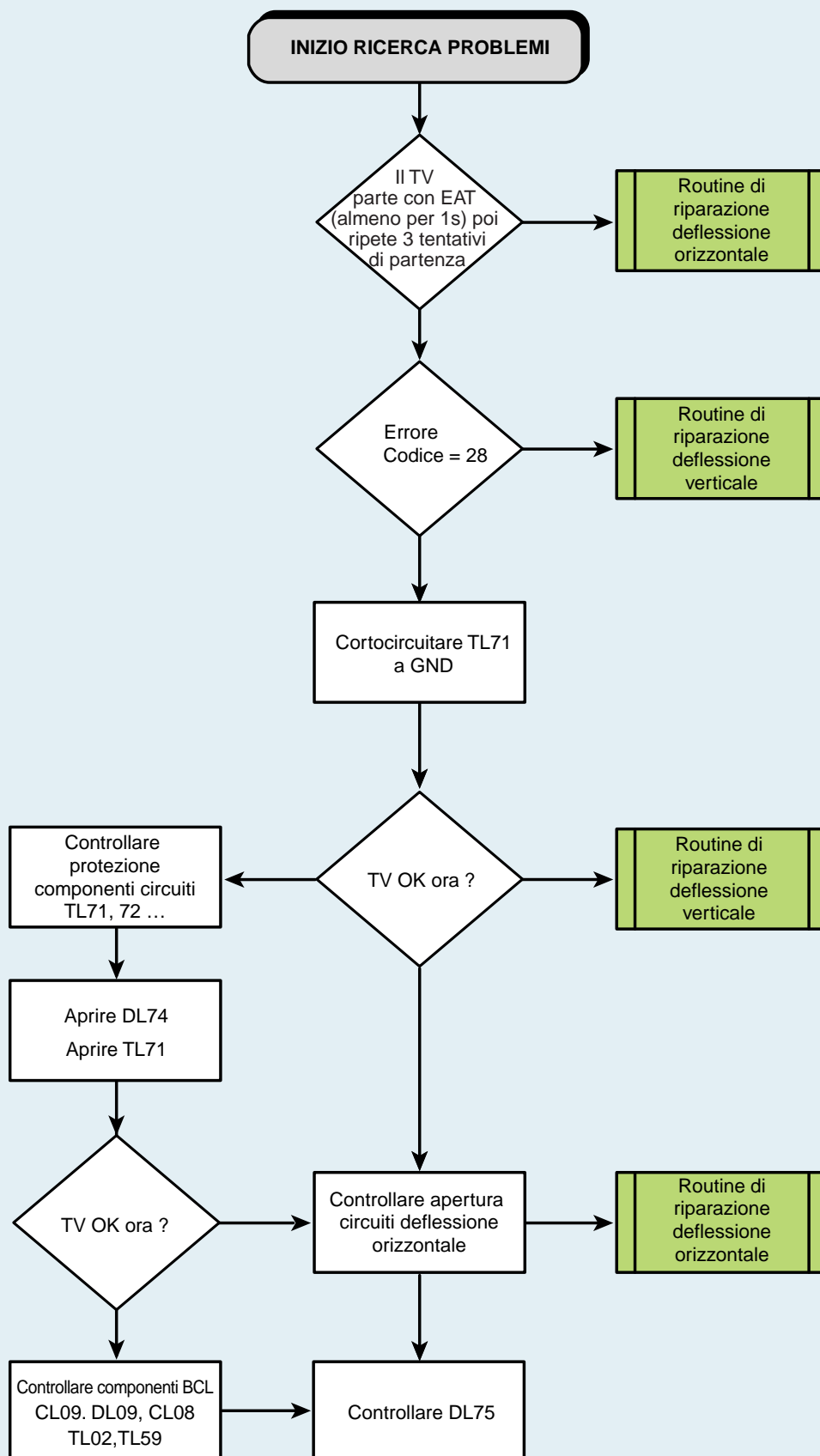
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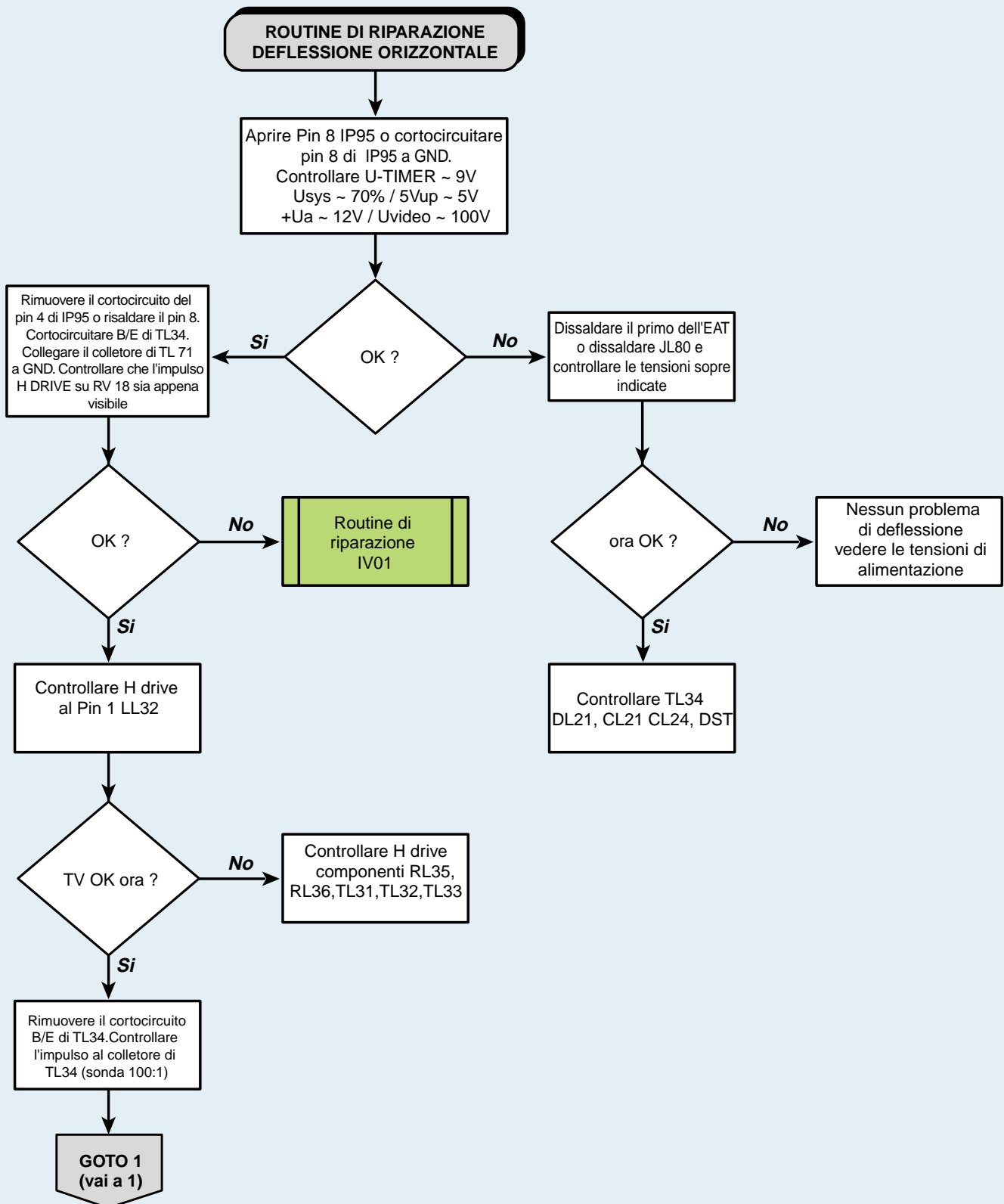
ÜBERPRÜFUNG DER ABLENKSCHALTUNG



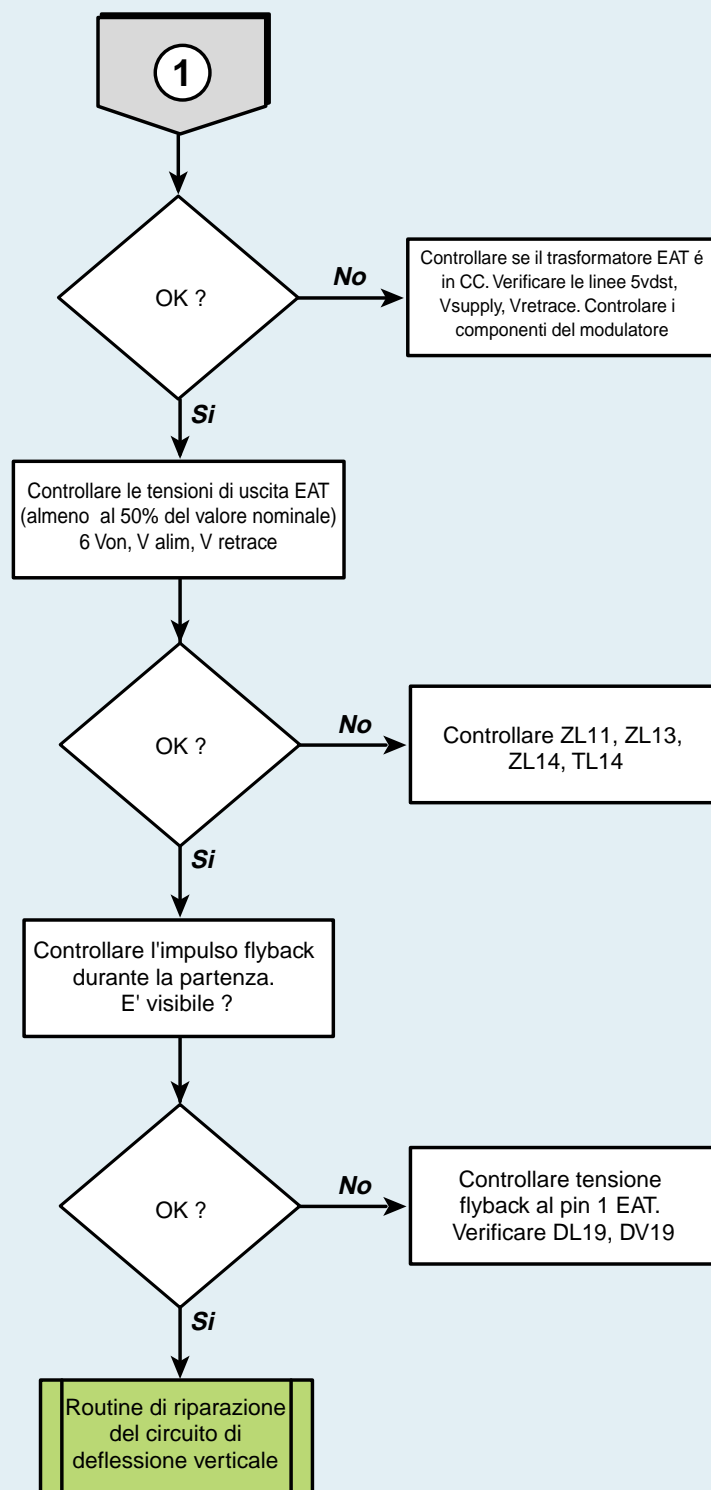
CONTROLLO DEI CIRCUITI DI DEFLESSIONE



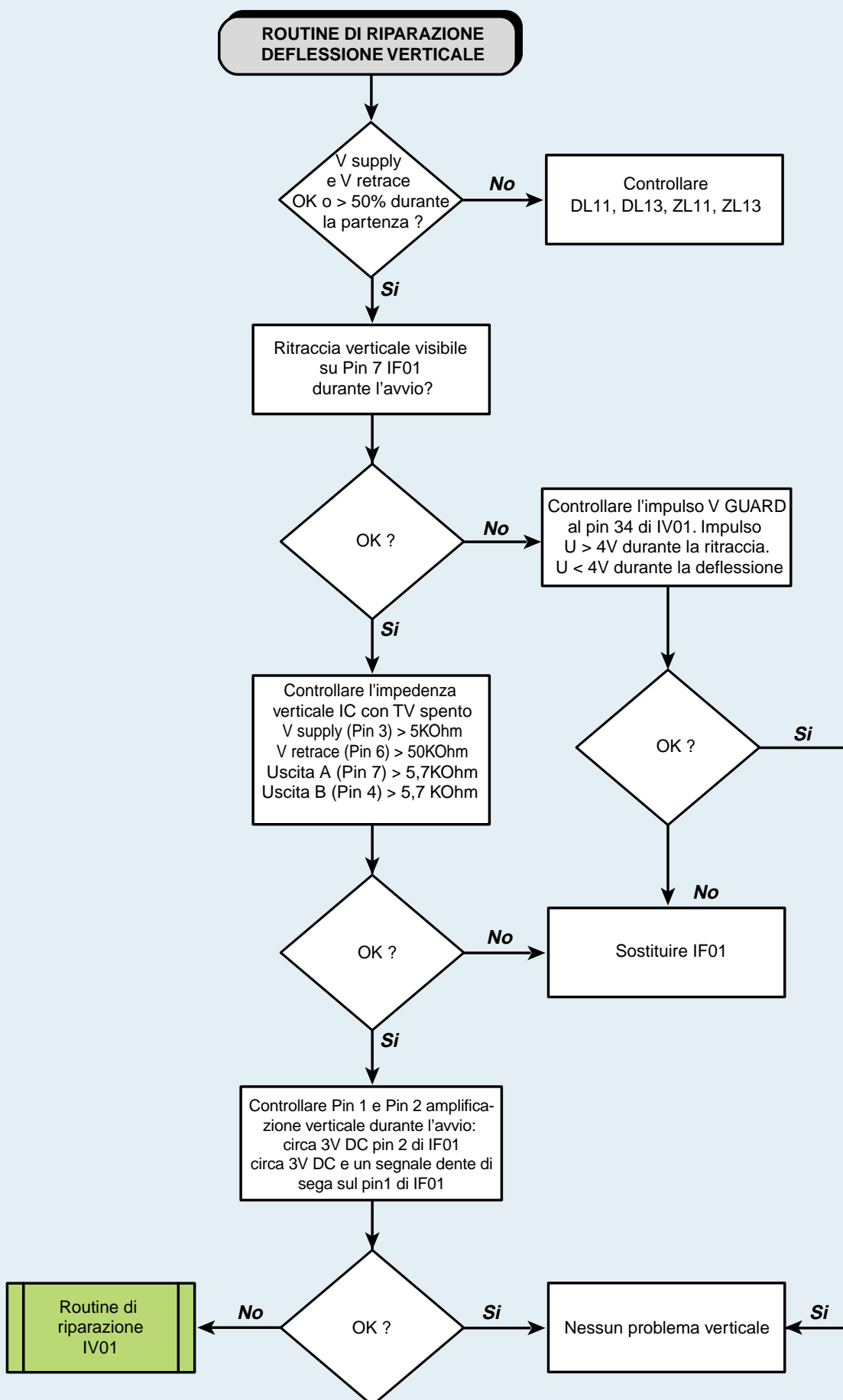
CONTROLLO DEI CIRCUITI DI DEFLESSIONE



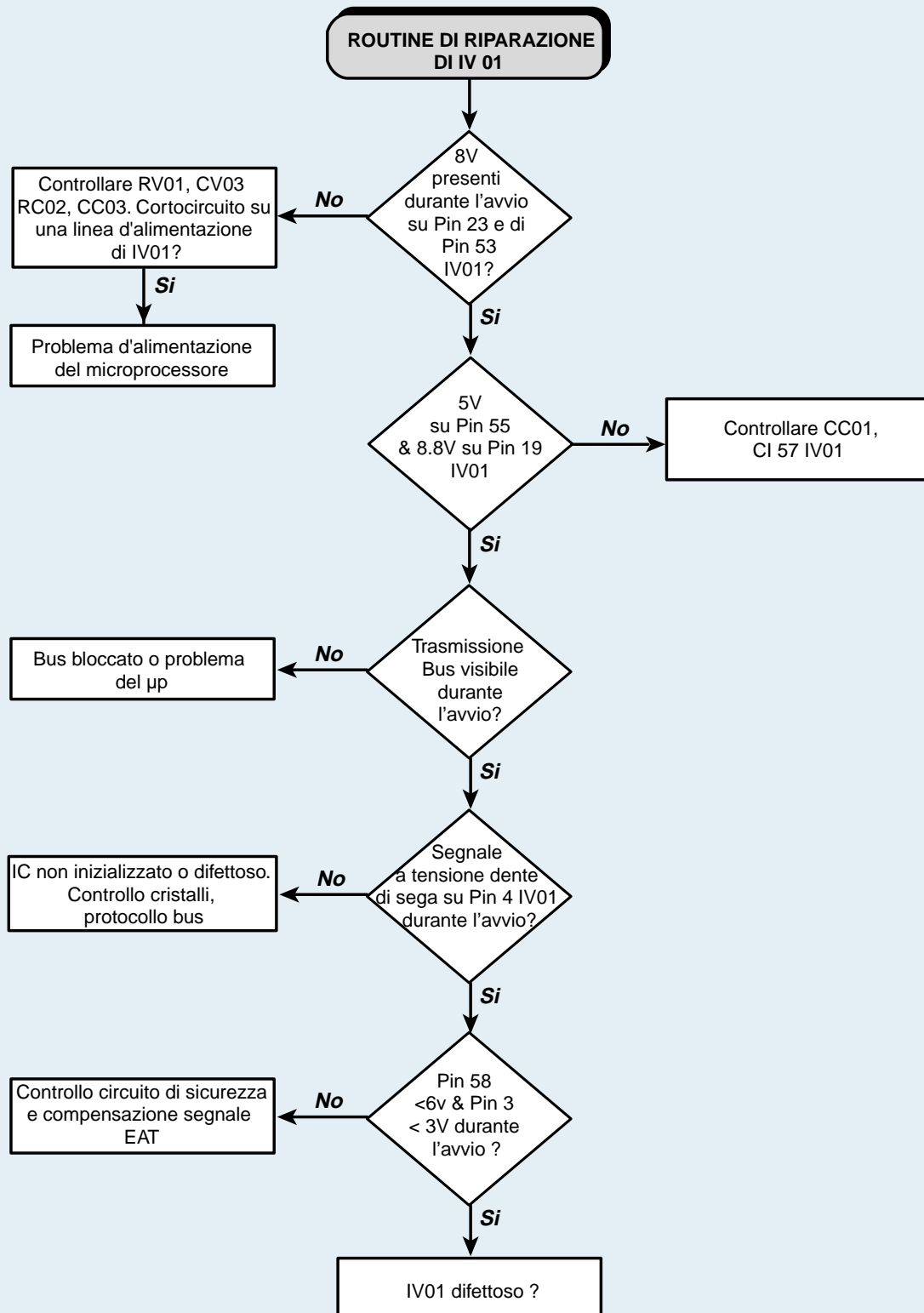
CONTROLLO DEI CIRCUITI DI DEFLESSIONE



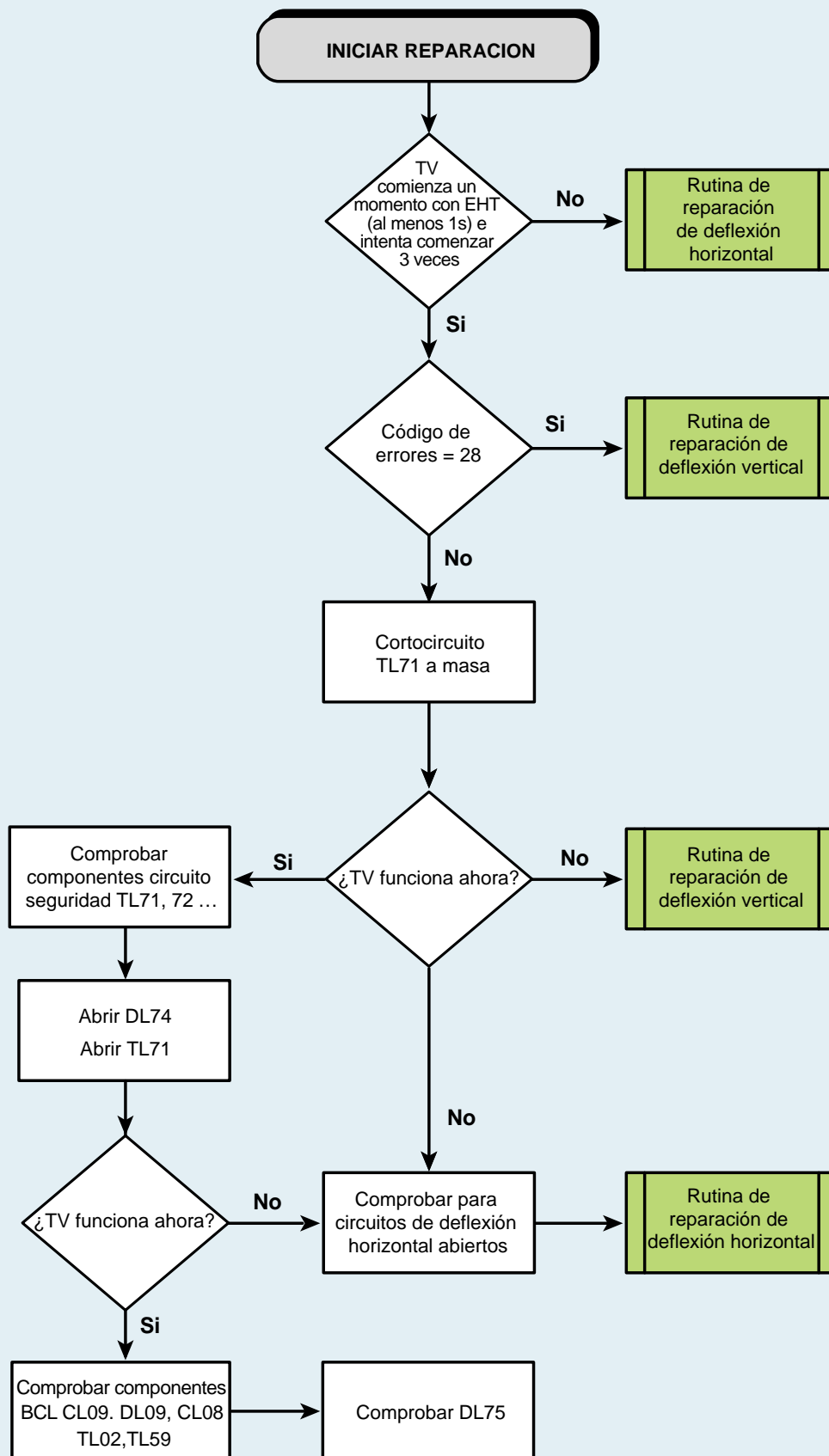
CONTROLLO DEI CIRCUITI DI DEFLESSIONE



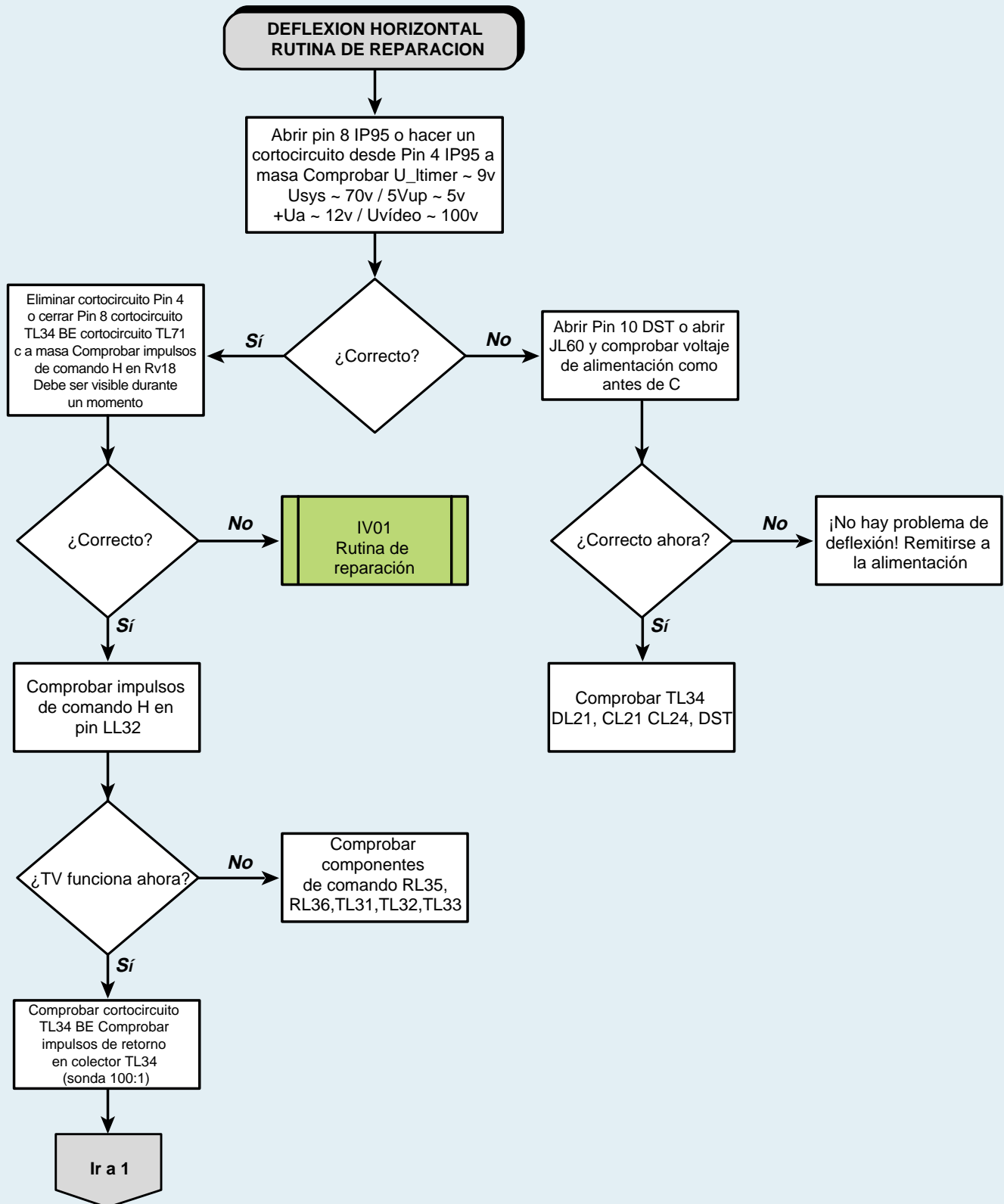
CONTROLLO DEI CIRCUITI DI DEFLESSIONE



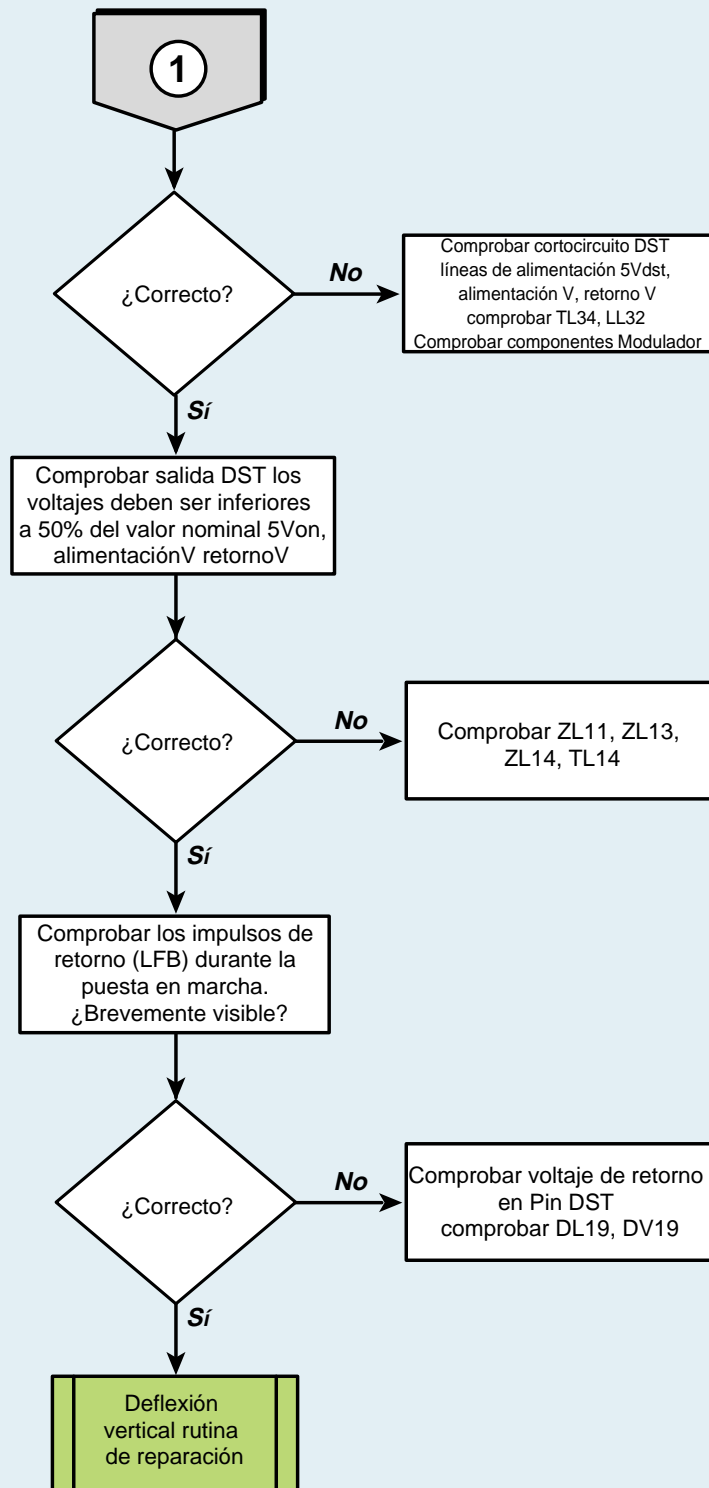
INSPECCION DEL CIRCUITO DE DEFLEXION



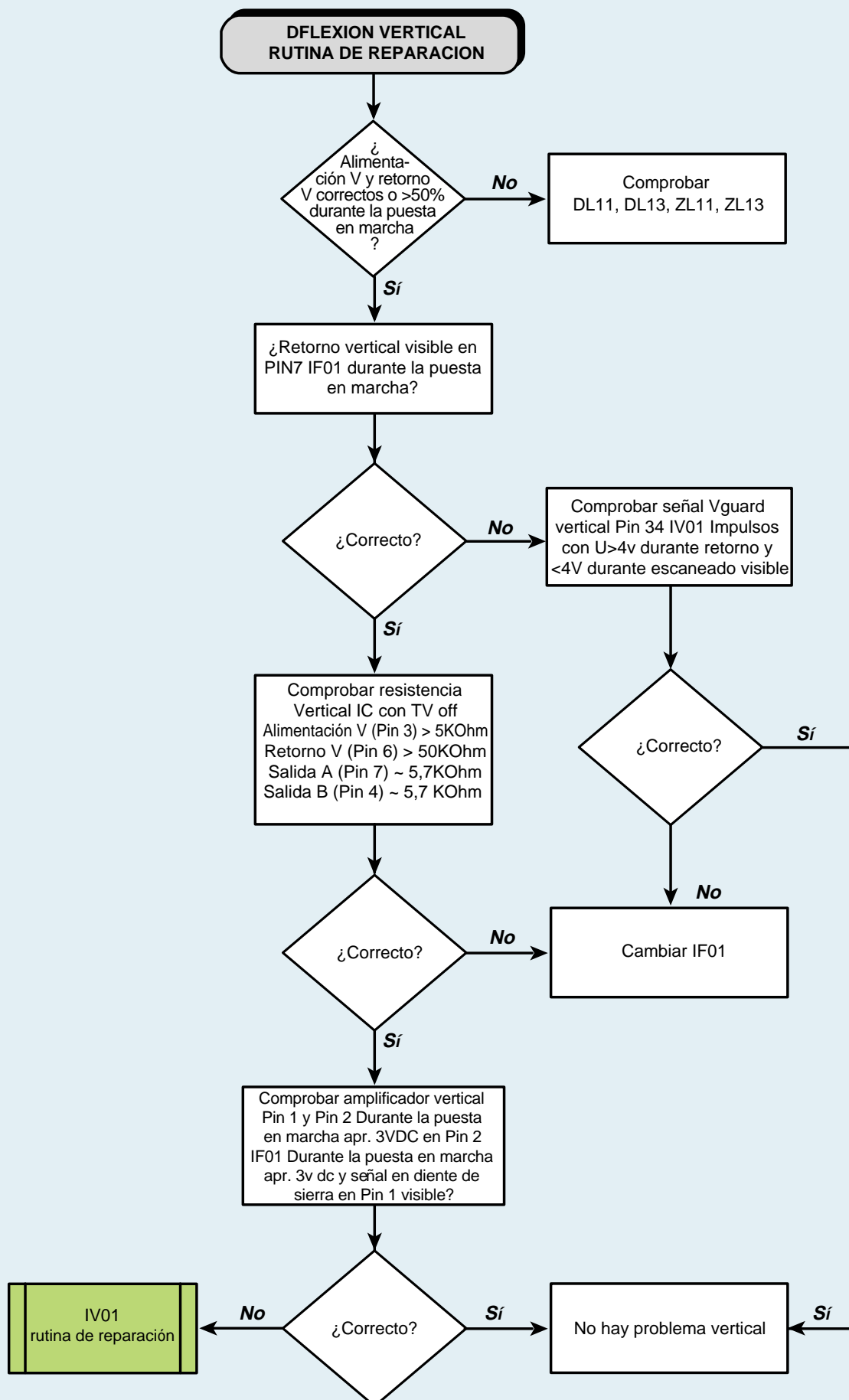
INSPECCION DEL CIRCUITO DE DEFLEXION



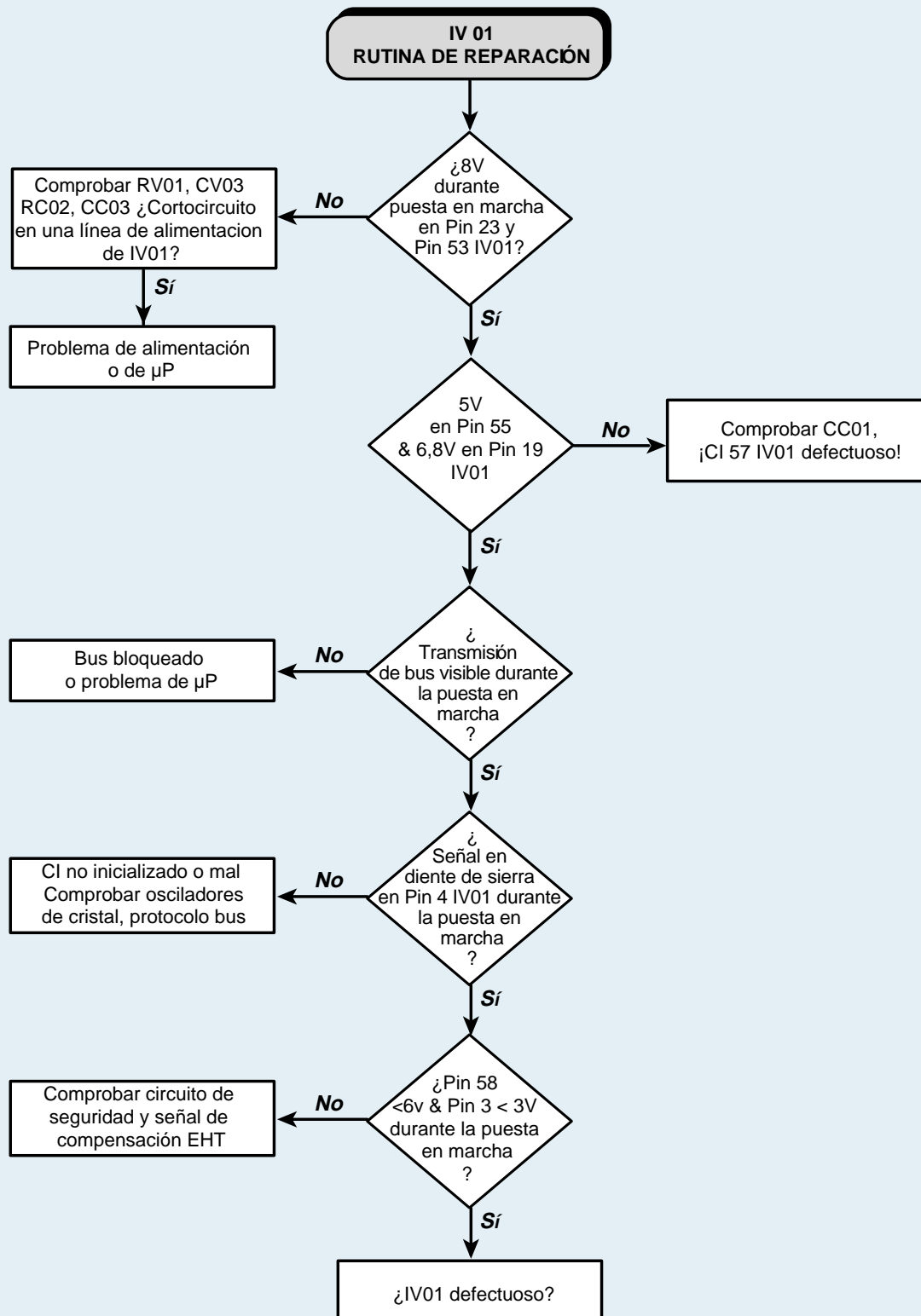
INSPECCION DEL CIRCUITO DE DEFLEXION



INSPECCION DEL CIRCUITO DE DEFLEXION



INSPECCION DEL CIRCUITO DE DEFLEXION

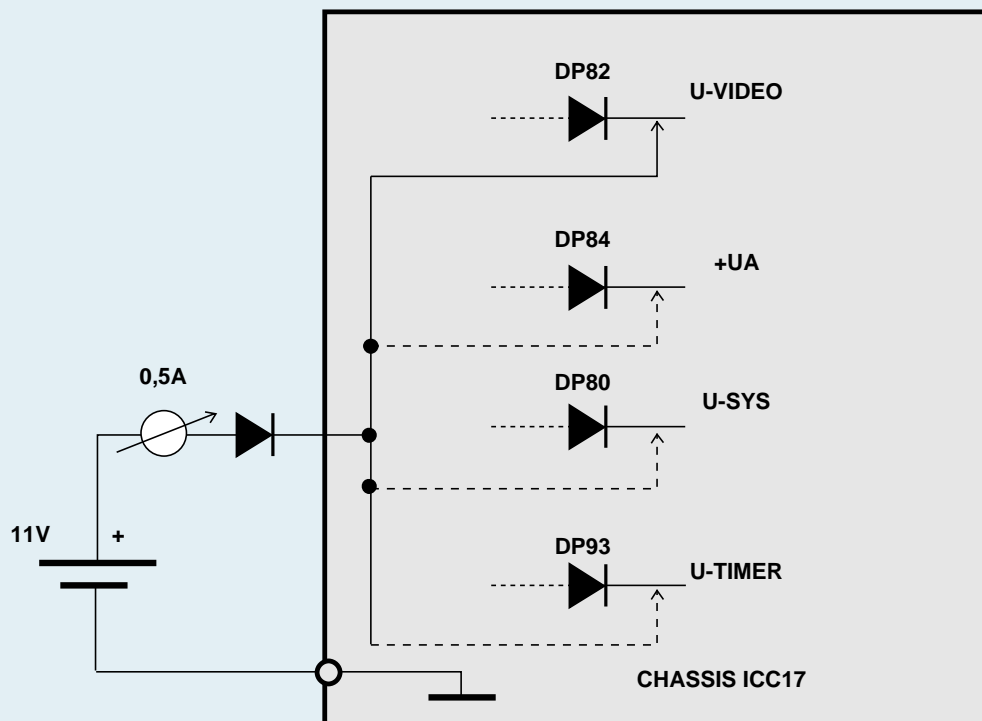


SECONDARY DC-VOLTAGES

All measurements in this chapter must be done WITHOUT the mains supply connected to the TV.

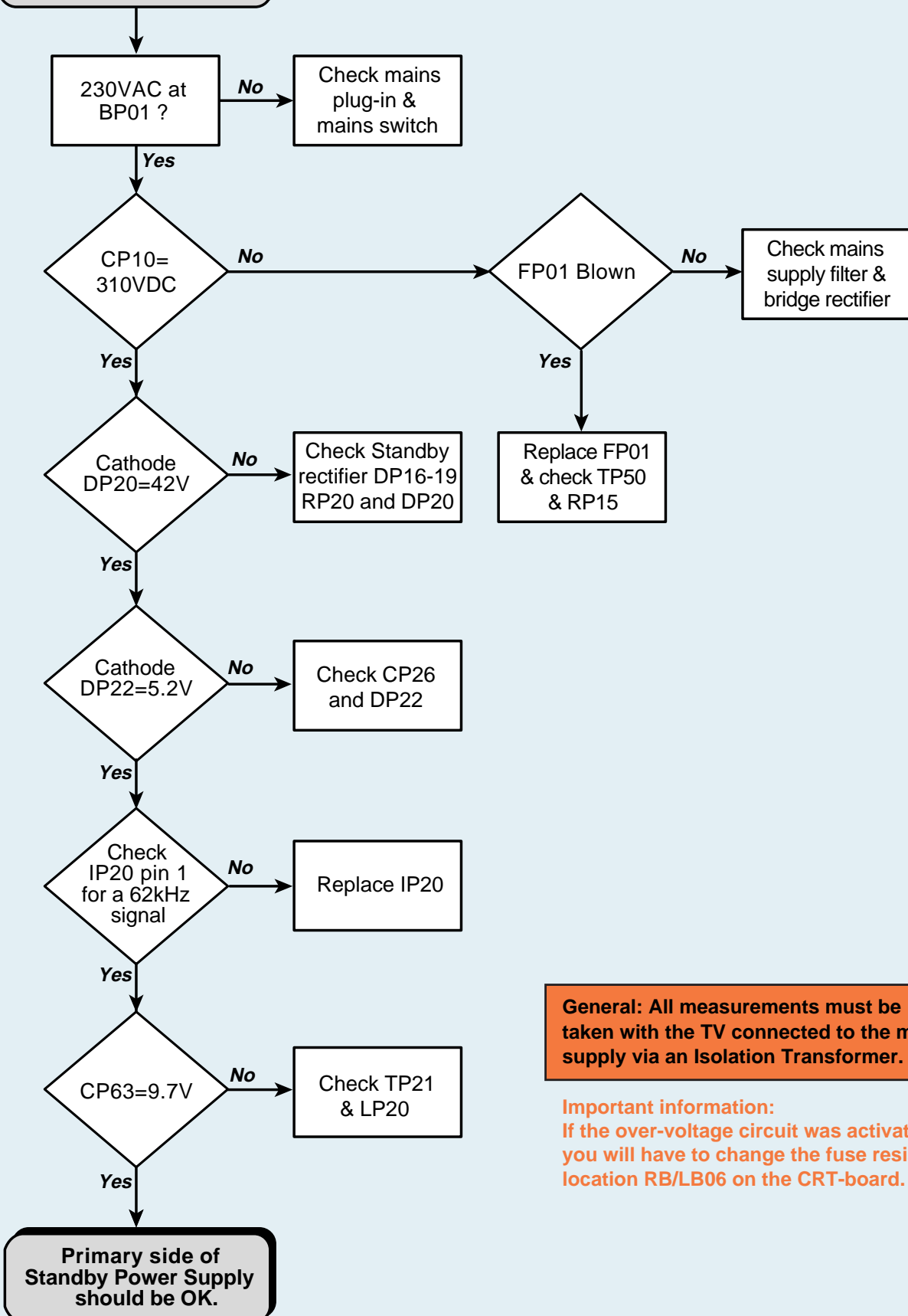
Test circuit:

The external voltage source is provided by a variable DC-power supply with its output voltage set to 11V and the current limitation set to 500mA's. The negative terminal of the DC-power supply must be directly connected to the chassis secondary ground plane. The positive terminal of the DC-power supply is first connected to an ammeter and then the anode of an isolation diode. The cathode of the isolation diode is then connected to the load on the chassis as shown below. Measure the current drawn by each load tested.



STANDBY POWER SUPPLY - PRIMARY SIDE

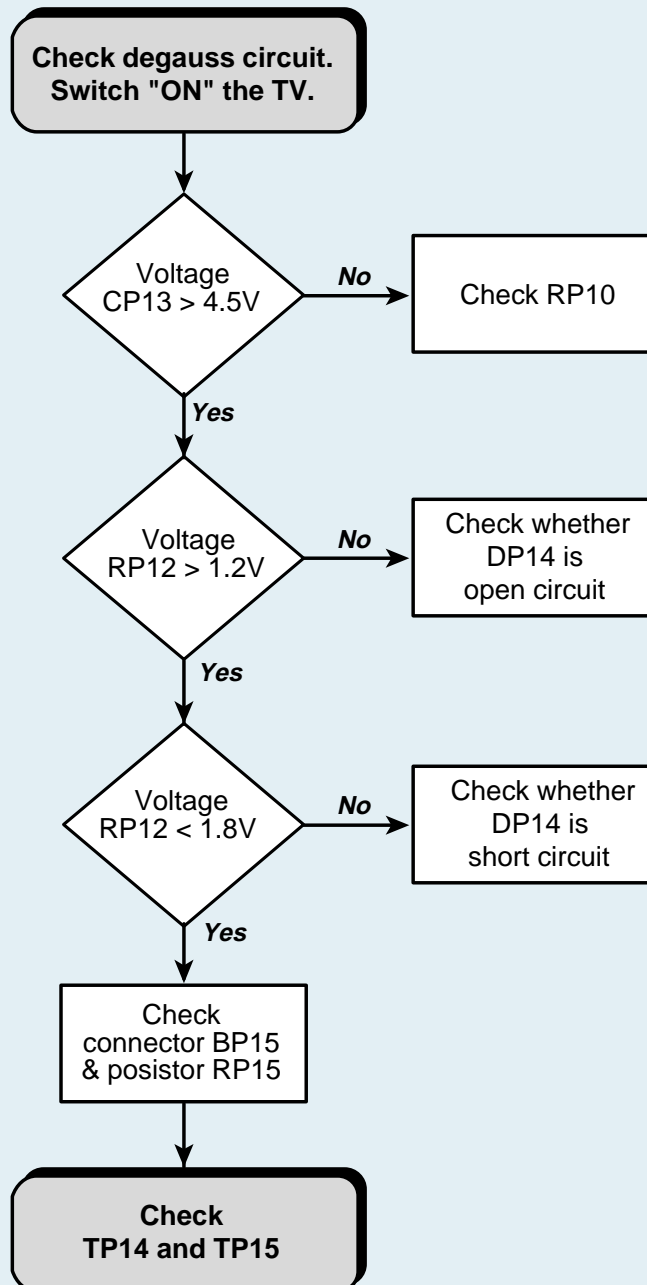
Short circuit pins 3 and 4 of LP50 and switch "ON" the mains supply.



General: All measurements must be taken with the TV connected to the mains supply via an Isolation Transformer.

Important information:
If the over-voltage circuit was activated, you will have to change the fuse resistor at location RB/LB06 on the CRT-board.

DEGAUSSING CIRCUIT



TENSIONS SECONDAIRES

Toutes les mesures de ce chapitre doivent être effectuées SANS alimentation secteur.
Utiliser une Alimentation continue externe

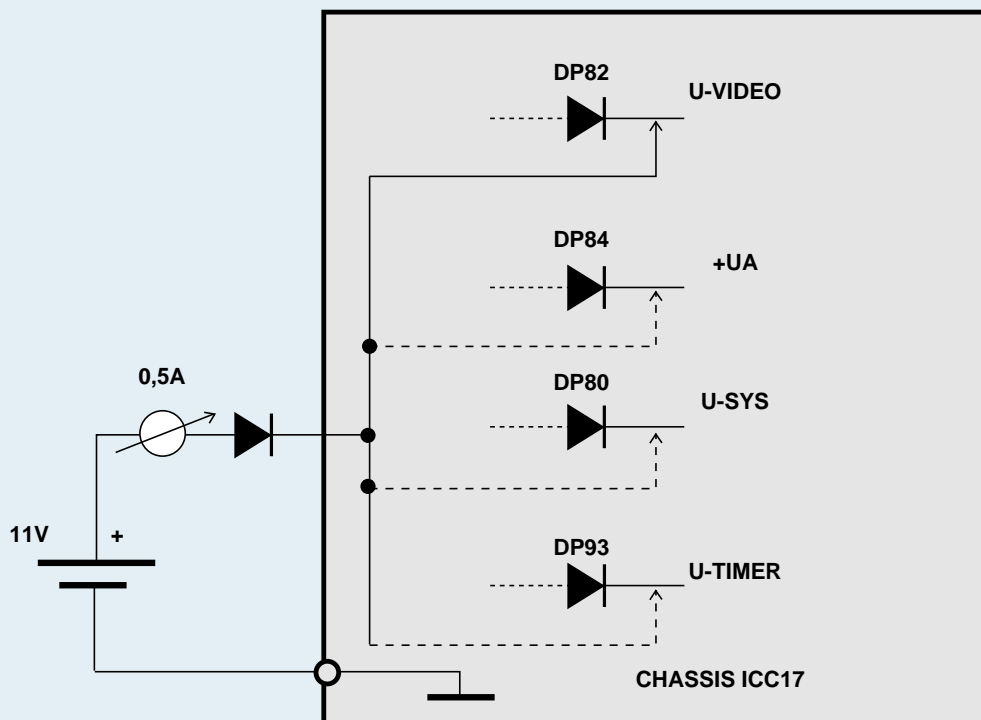
Circuit Test:

L'alimentation externe est une alimentation continue de 11V réglable avec un courant de limitation de 0.5A.

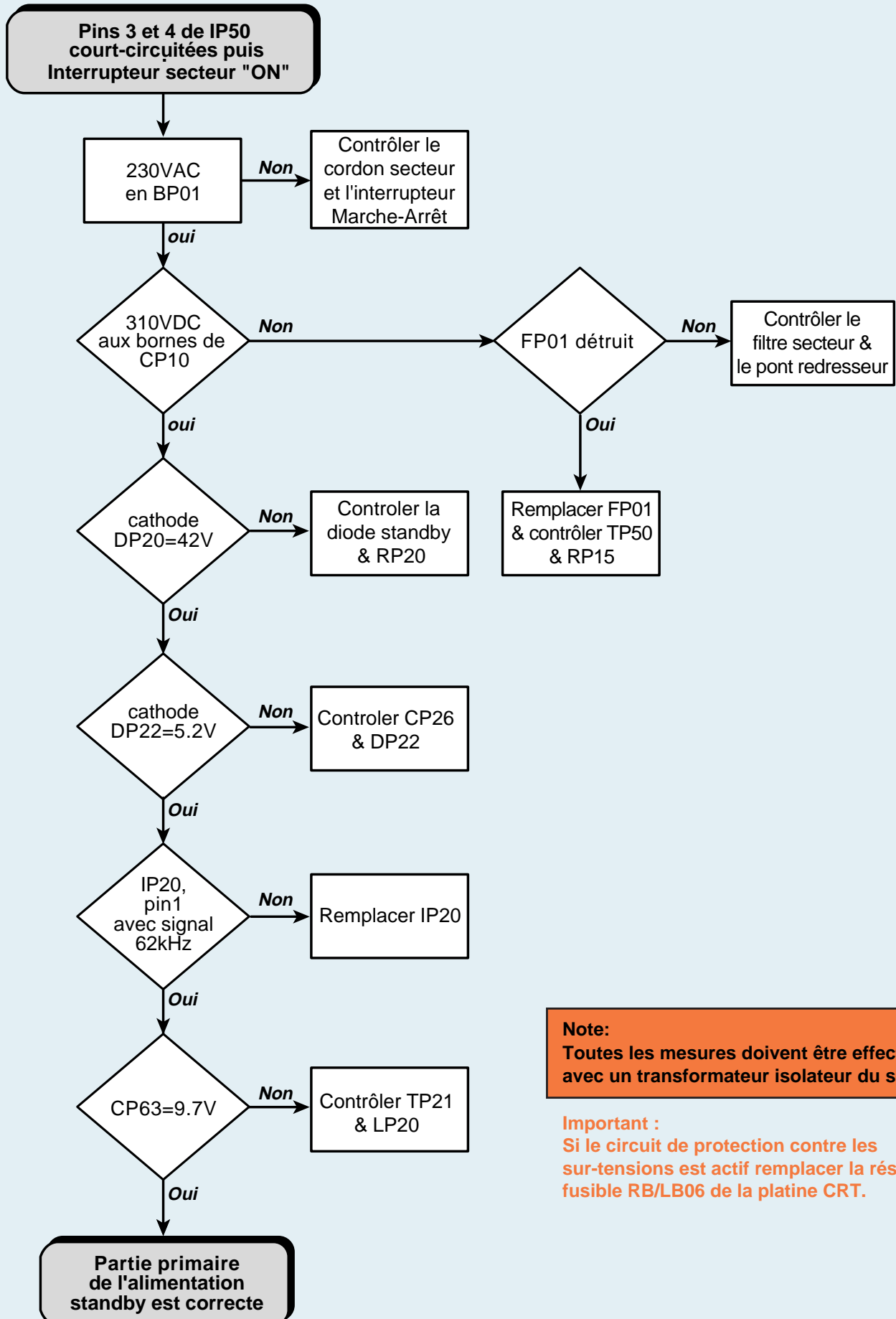
Le pôle - est relié à la masse secondaire du chassis.

Le pôle + de l'alimentation externe sera réunie à travers une diode, aux circuits de charge indiqués en début d'organigramme.(voir schéma ci-contre).

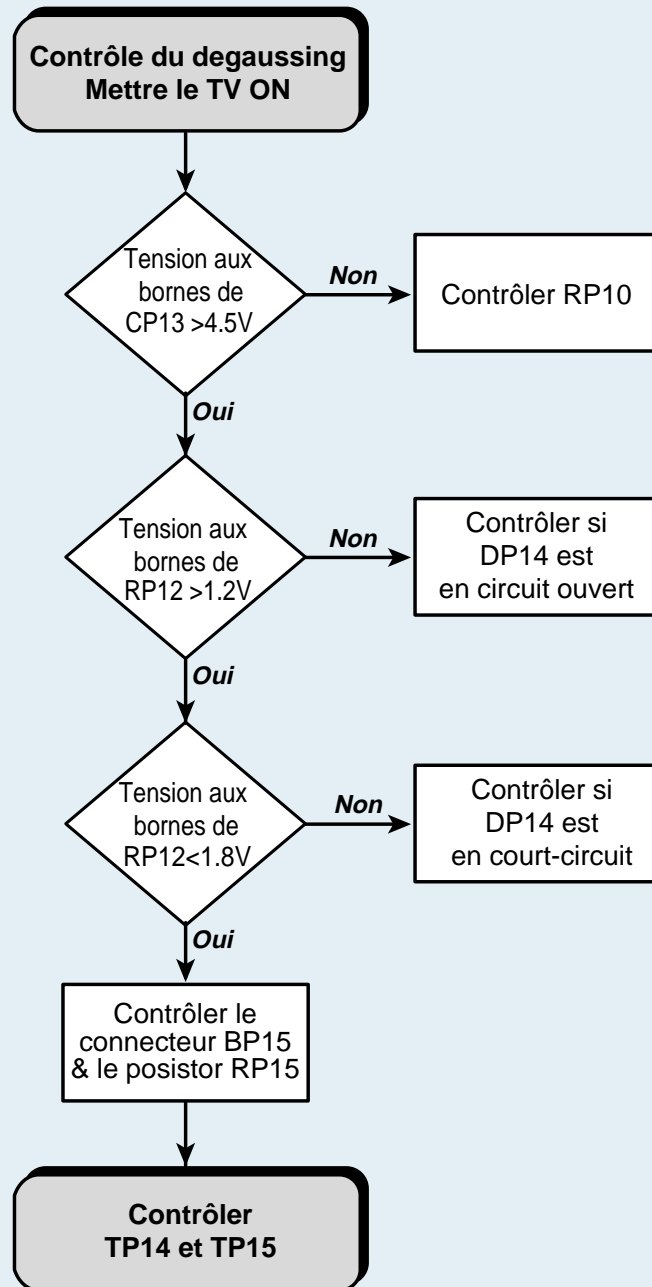
Le courant de charge devra être mesuré.



ALIMENTATION STANDBY - PARTIE PRIMAIRE



CIRCUITS DE DEGAUSSING



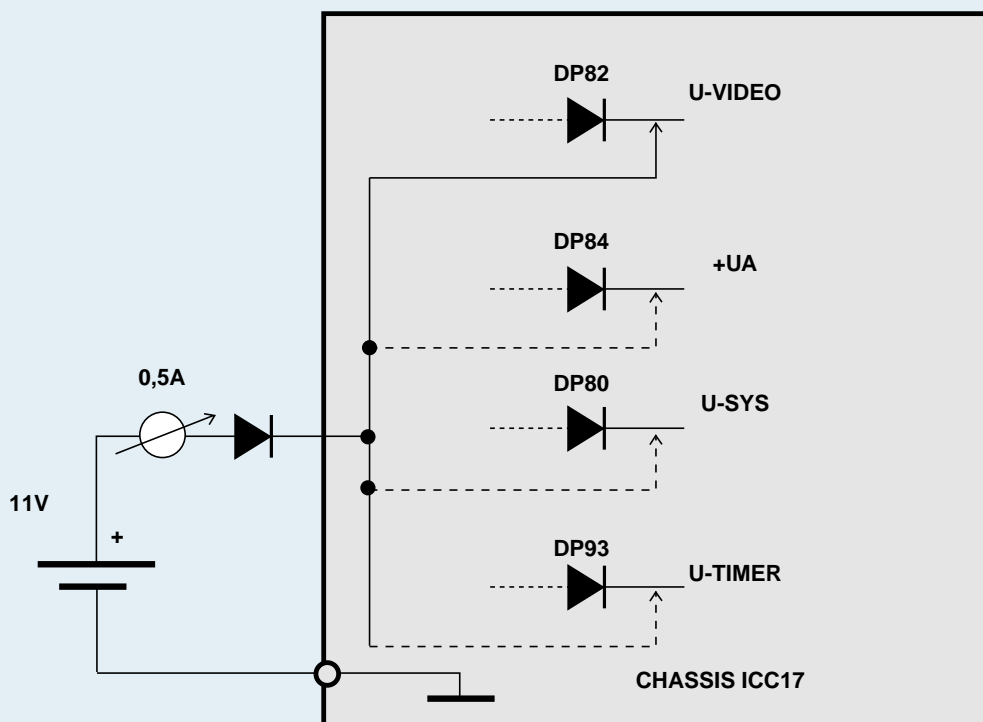
ÜBERPRÜFUNG DER SEKUNDÄRSEITIGEN GLEICHSPANNUNGEN

Alle Messungen in diesem Kapitel müssen ohne Netzspannung vorgenommen werden. Benutzen Sie die Testschaltung.

Testschaltung:

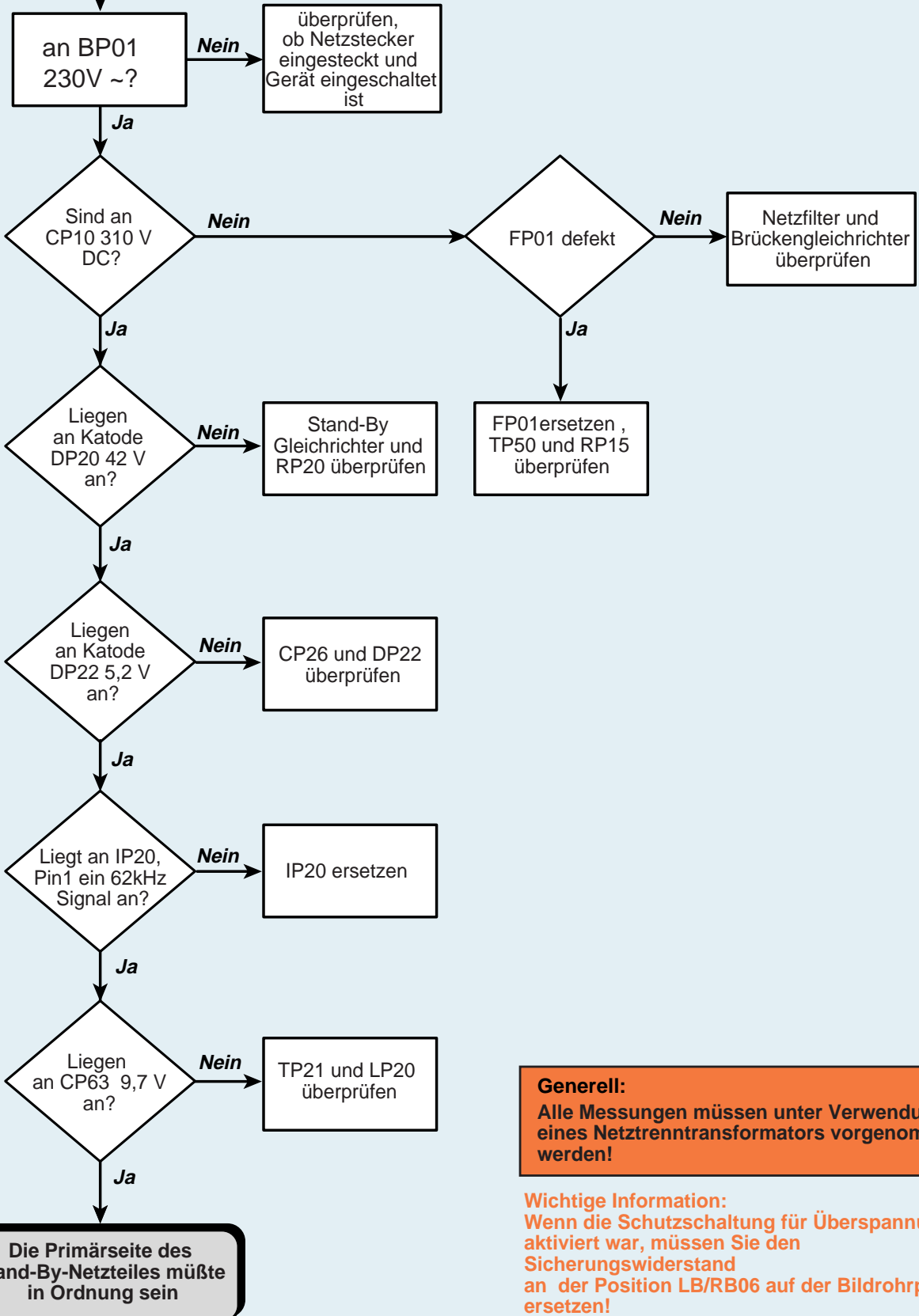
Die externe Spannung ist an ein externes Netzteil mit einer eingestellten Spannung von 11 V und einer Strombegrenzung von 0,5 A angeschlossen

Der Minuspol der externen Spannungsquelle wird direkt mit der Masse des sekundären Netzteils verbunden! Der Pluspol der externen Spannungsquelle wird über eine Diode eingespeist, wobei die Anode dieser Diode mit dem Pluspol verbunden ist. Die Katode ist mit dem entsprechenden Einspeisepunkt auf dem Chassis verbunden. Der Strom muß gemessen werden.



STAND-BY NETZTEIL - PRIMÄRSEITE

IP 50 an Pin 3 und 4
kurzschließen. Gerät mit
Hauptschalter einschalten



Generell:

Alle Messungen müssen unter Verwendung eines Netztrenntransformators vorgenommen werden!

Wichtige Information:

Wenn die Schutzschaltung für Überspannung aktiviert war, müssen Sie den Sicherungswiderstand an der Position LB/RB06 auf der Bildrohrplatte ersetzen!

ENTMAGNETISIERUNGSSCHALTUNG

